

Fig. 1

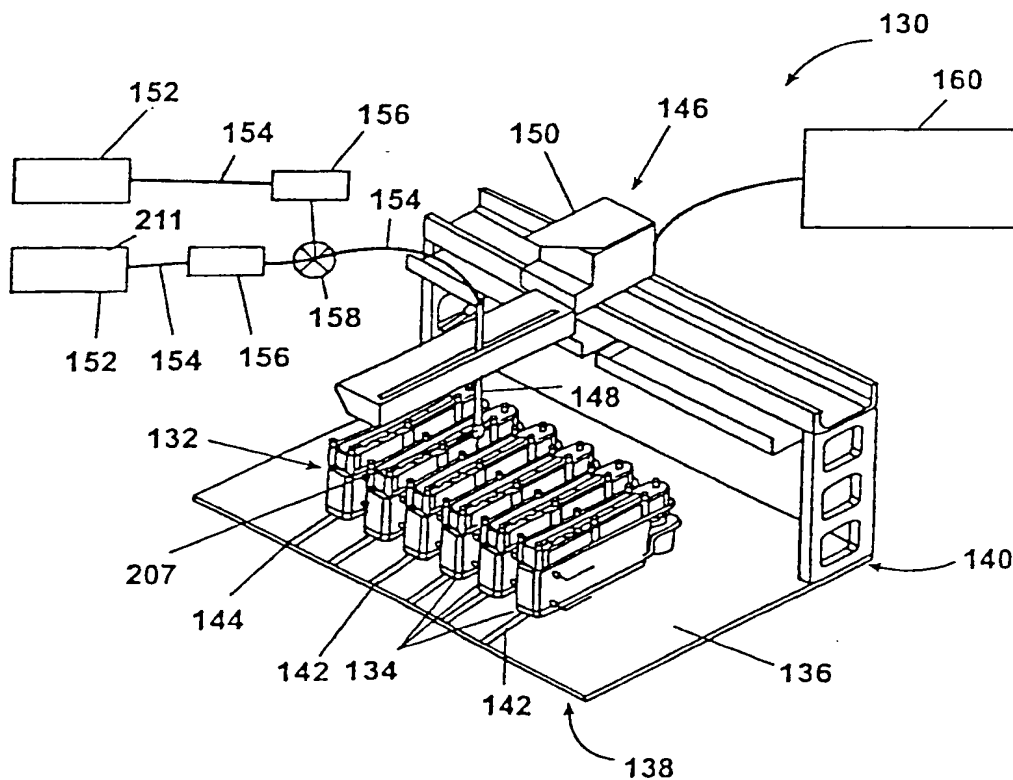
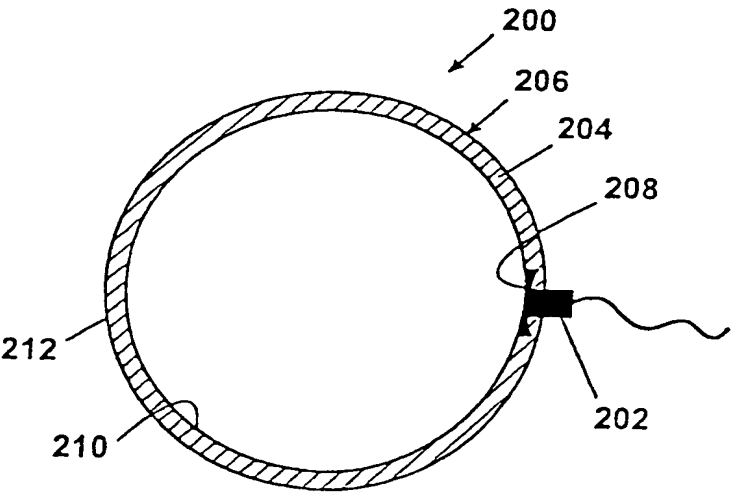
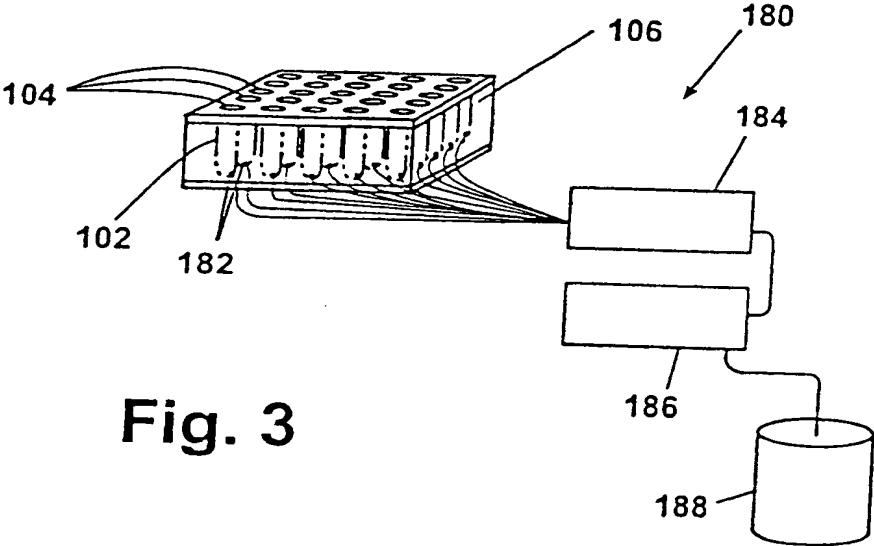


Fig. 2



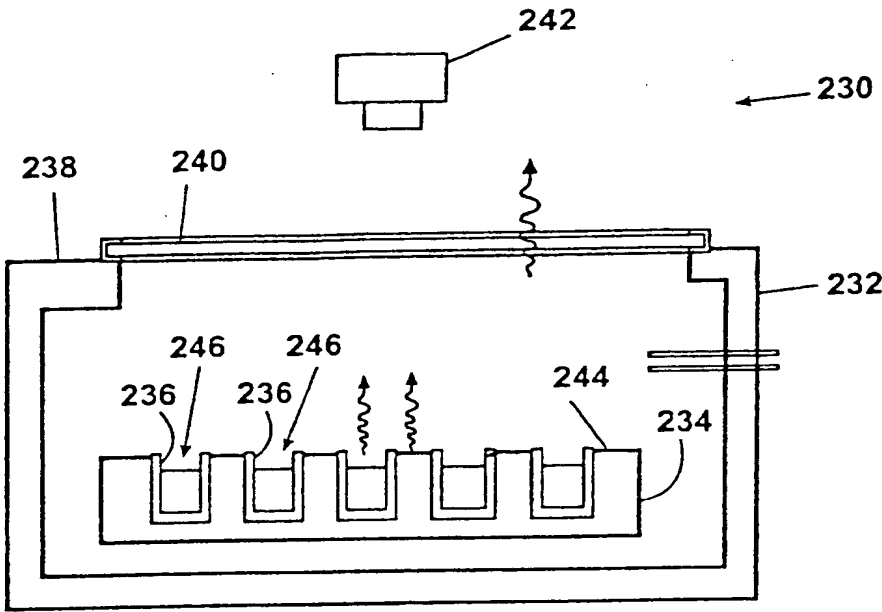


Fig. 5

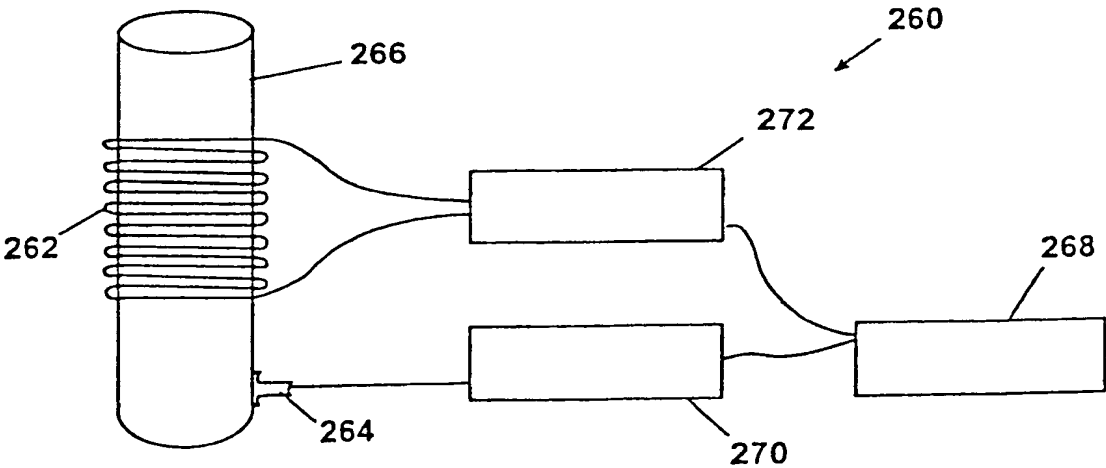
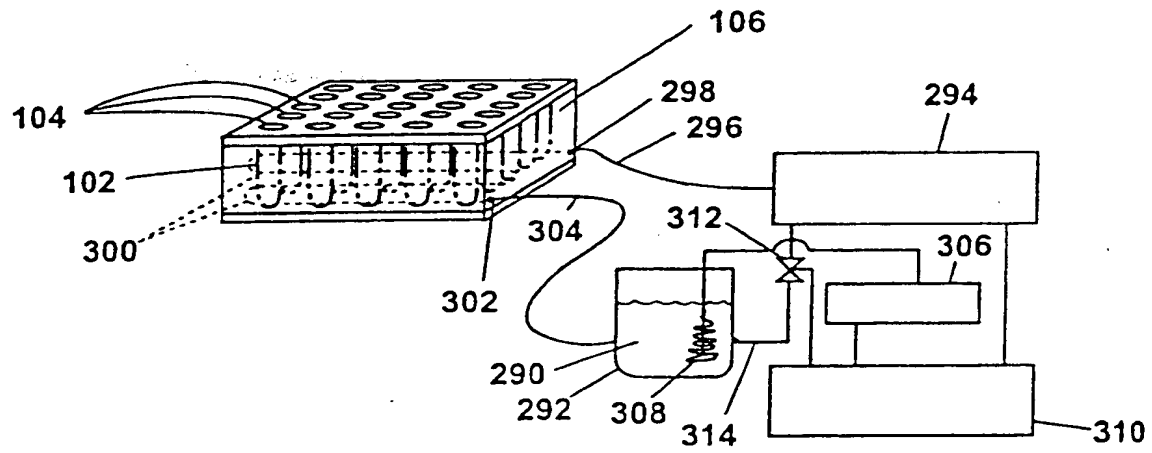
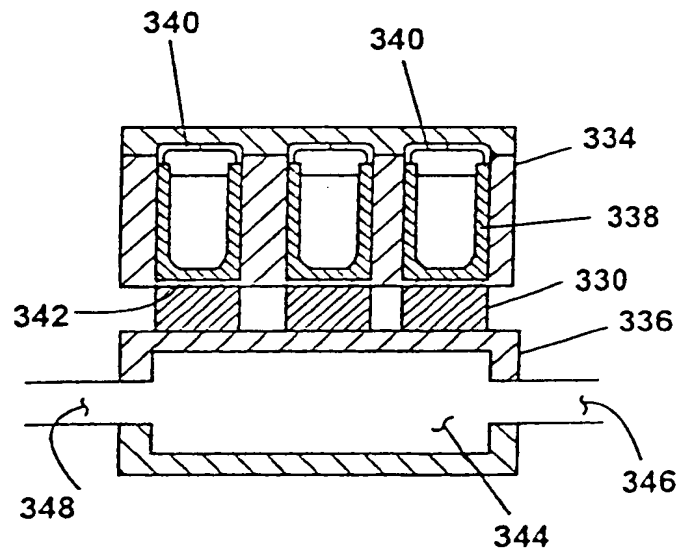
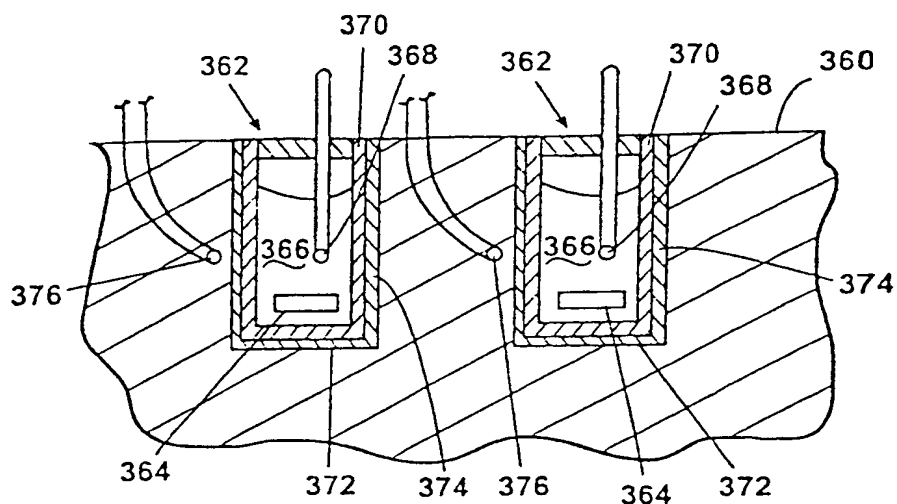
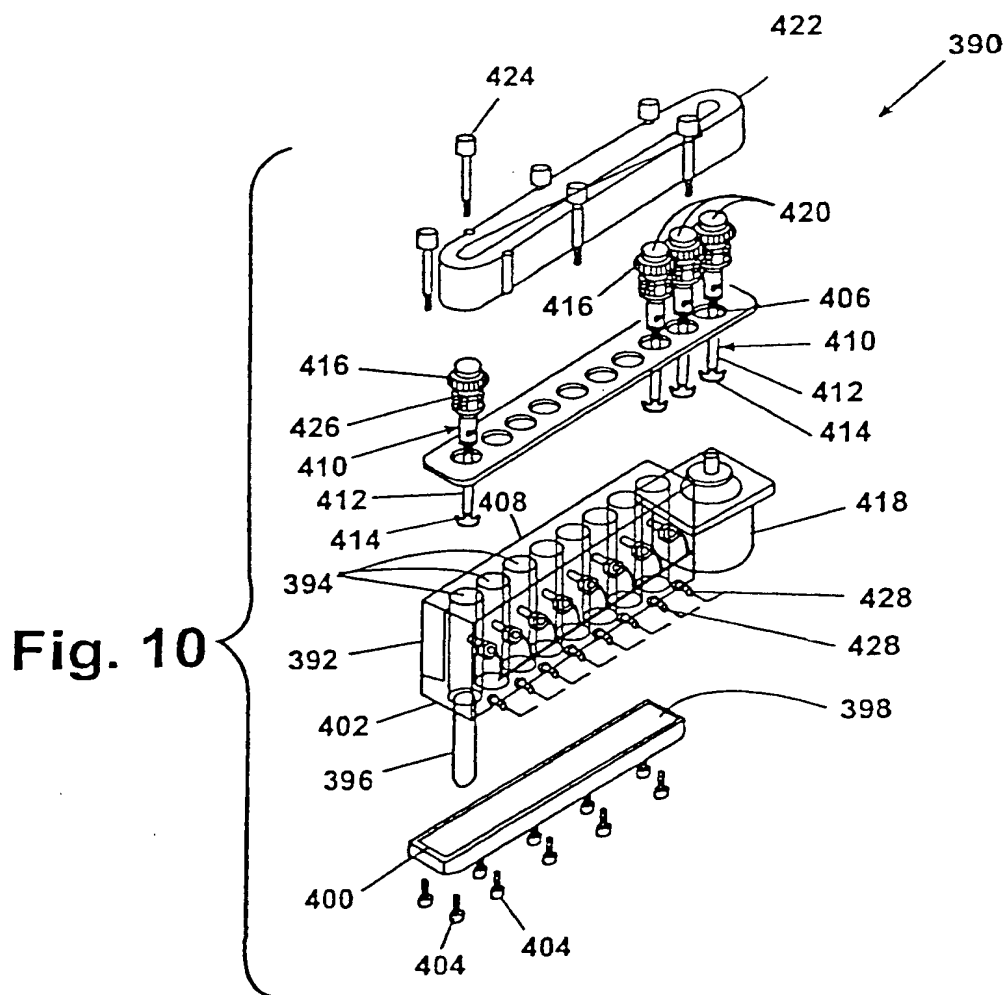


Fig. 6

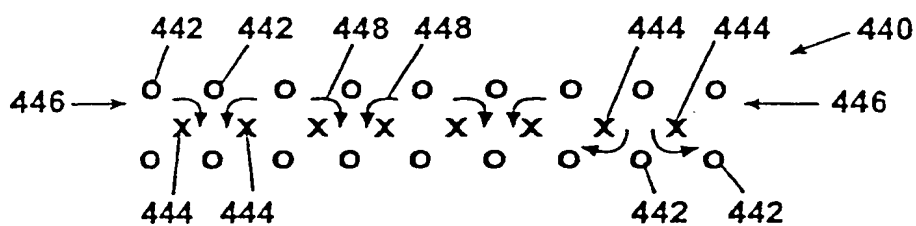
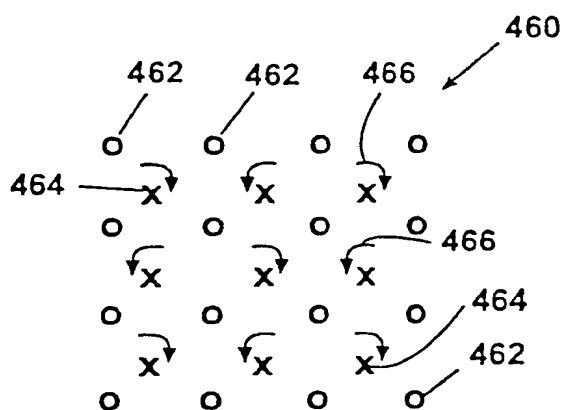
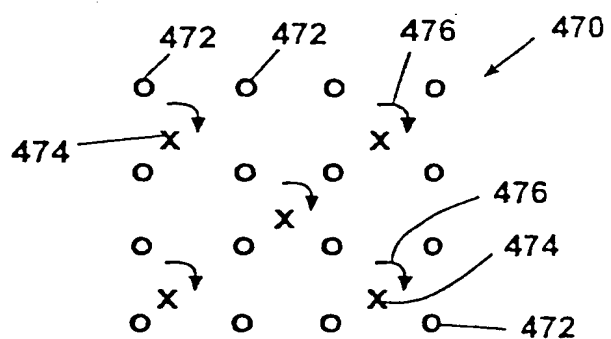
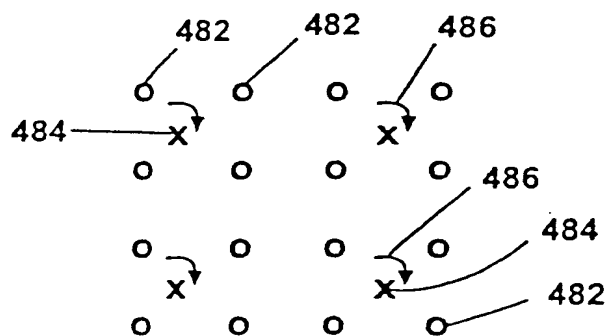
**Fig. 7****Fig. 8**

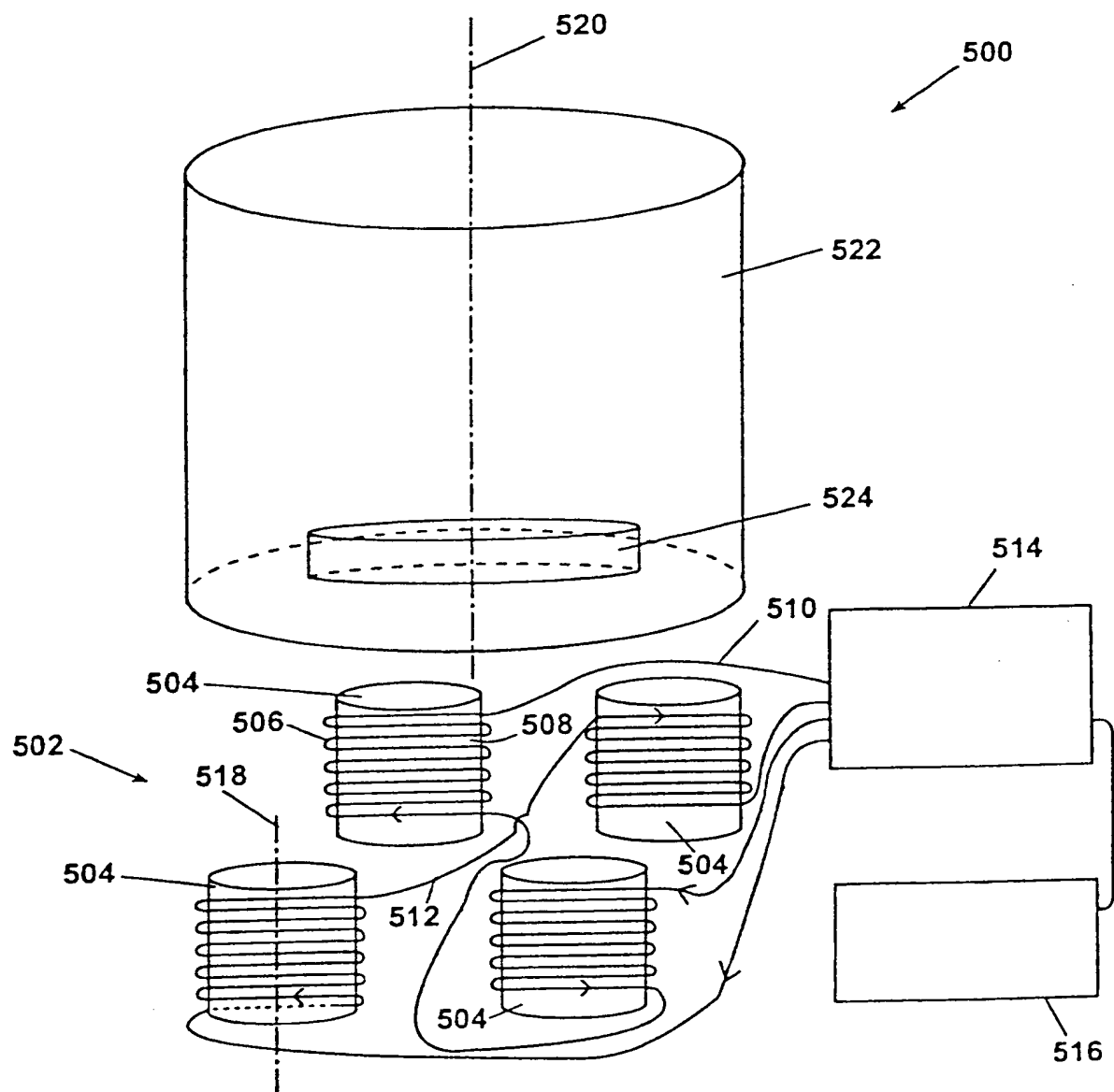


**Fig. 9**



**Fig. 10**

**Fig. 11****Fig. 12****Fig. 13****Fig. 14**

**Fig. 15**

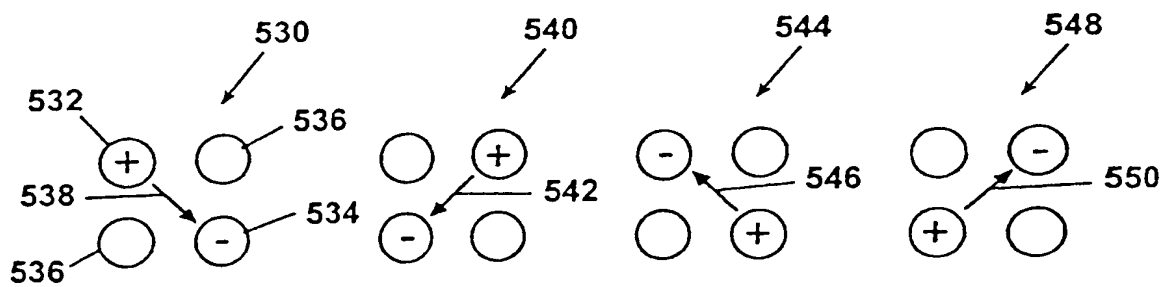


Fig. 16

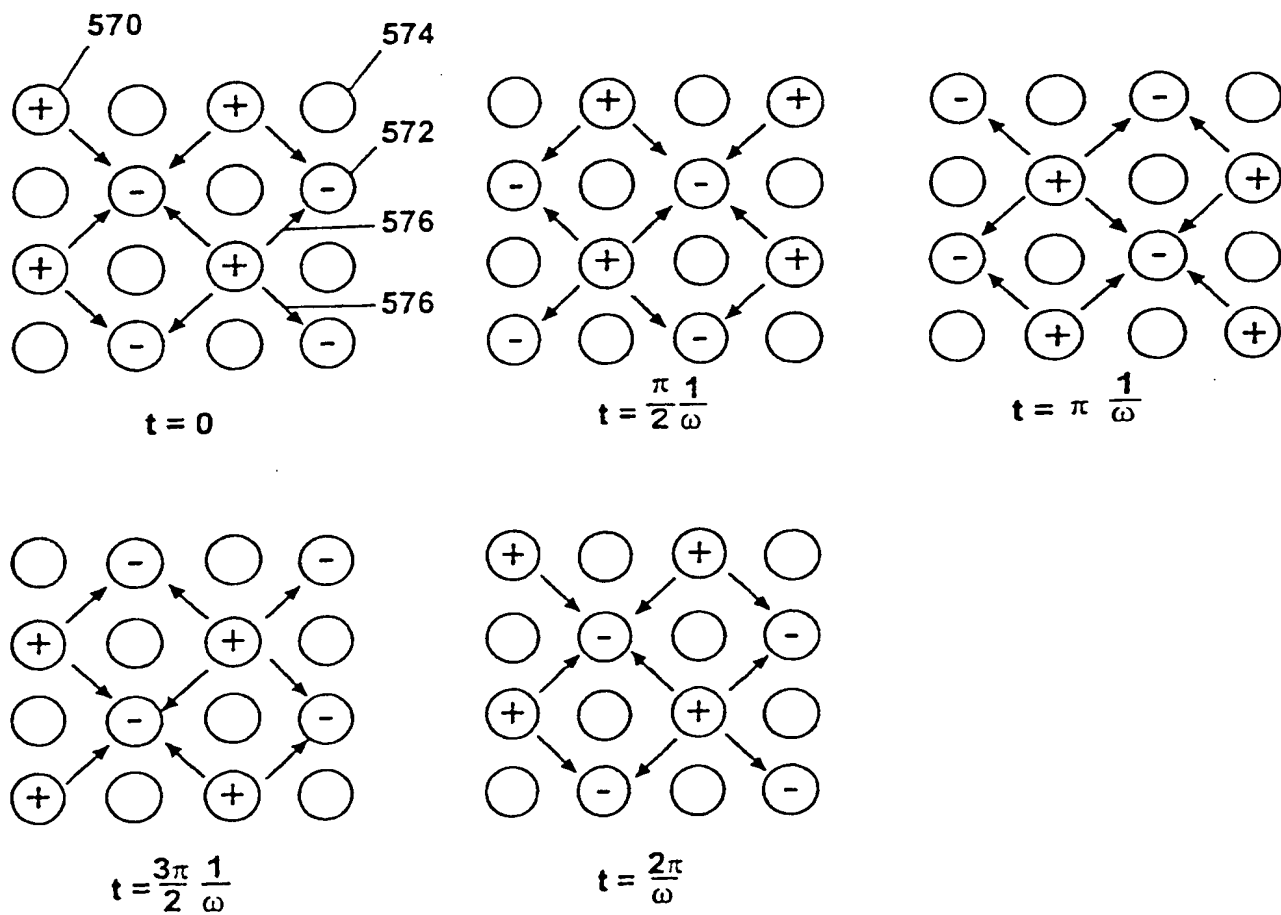


Fig. 17



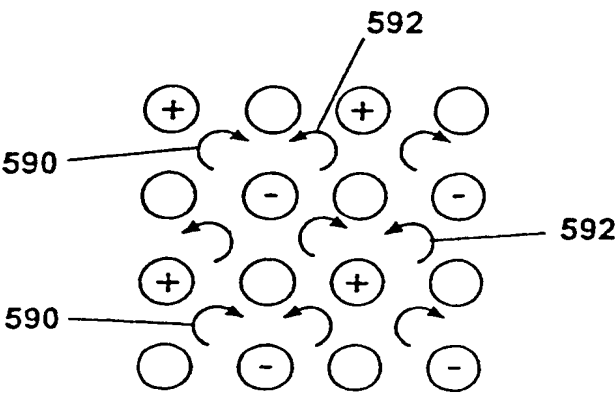


Fig. 18

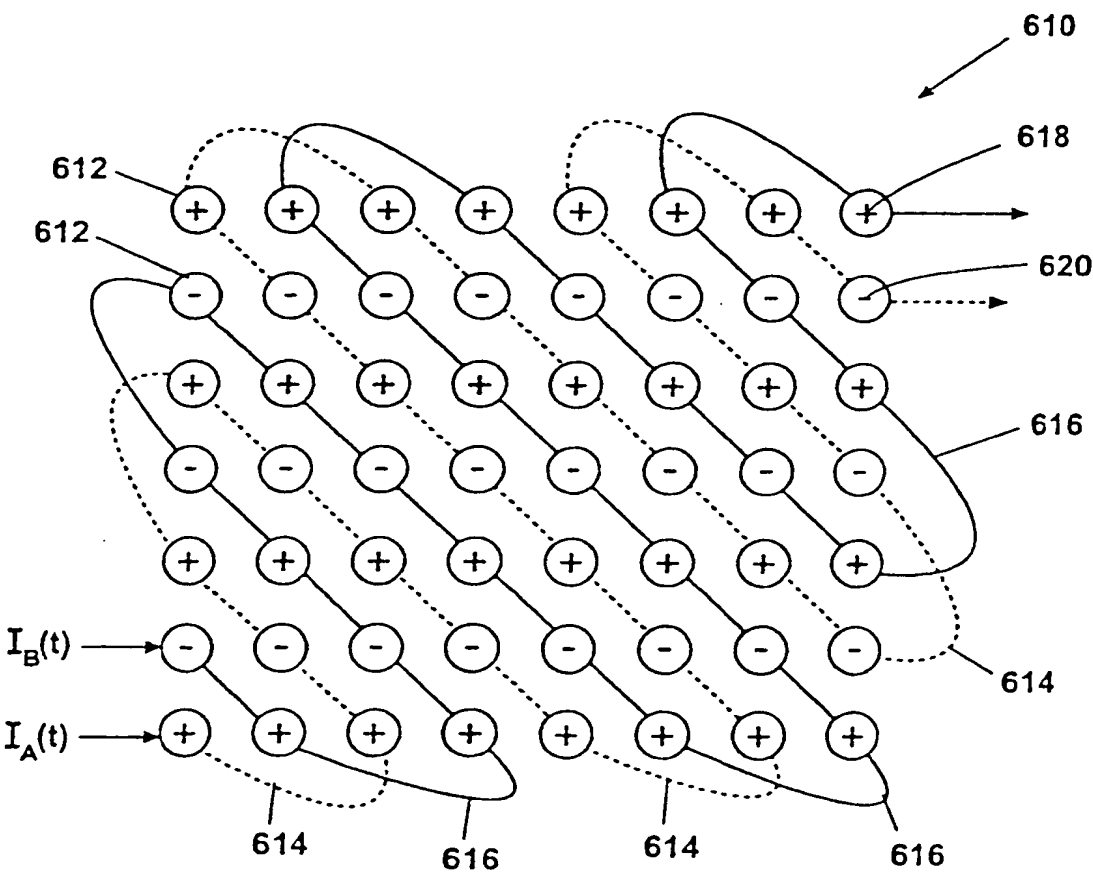


Fig. 19

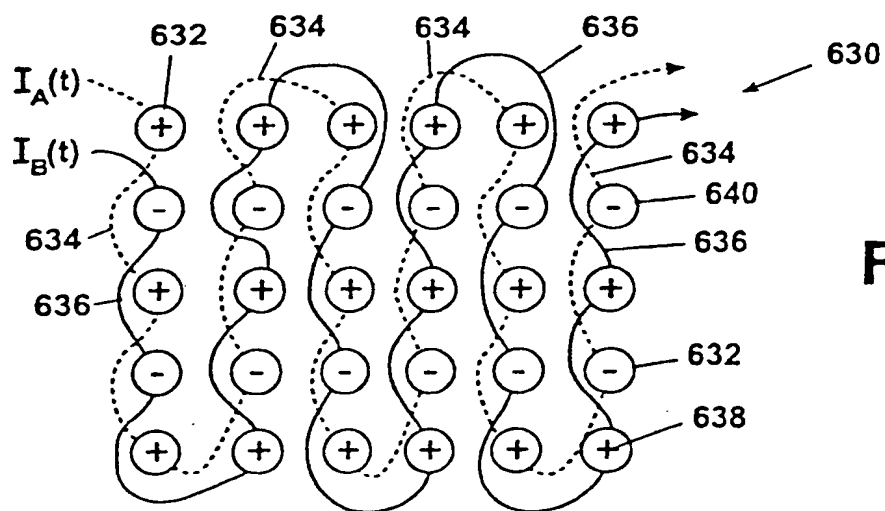


Fig. 20

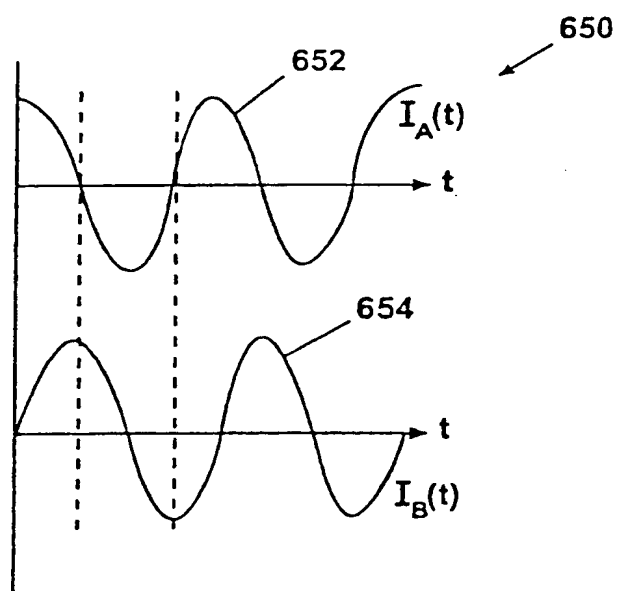


Fig. 21

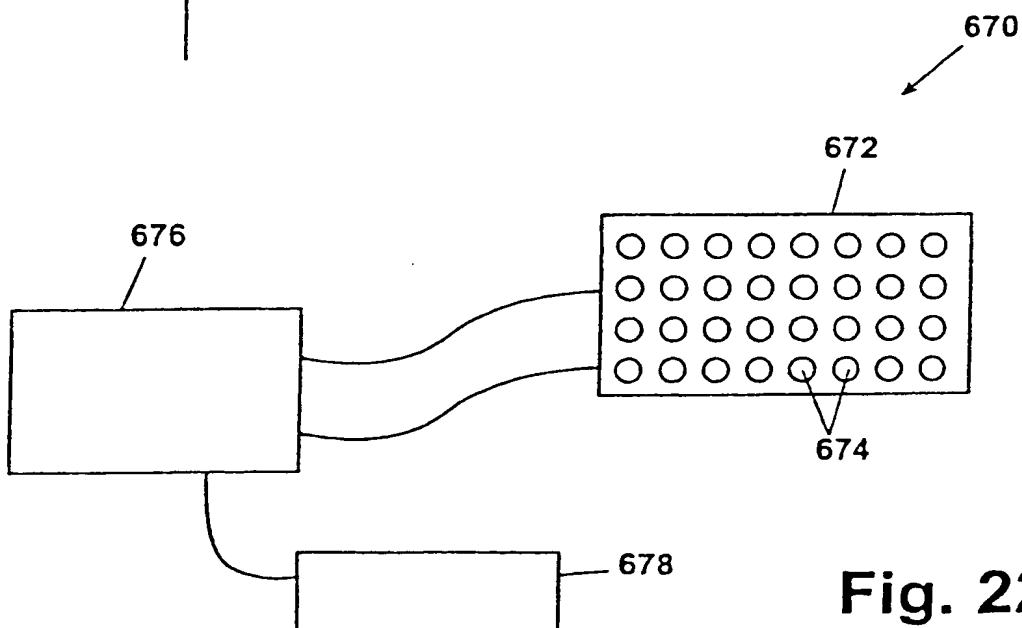
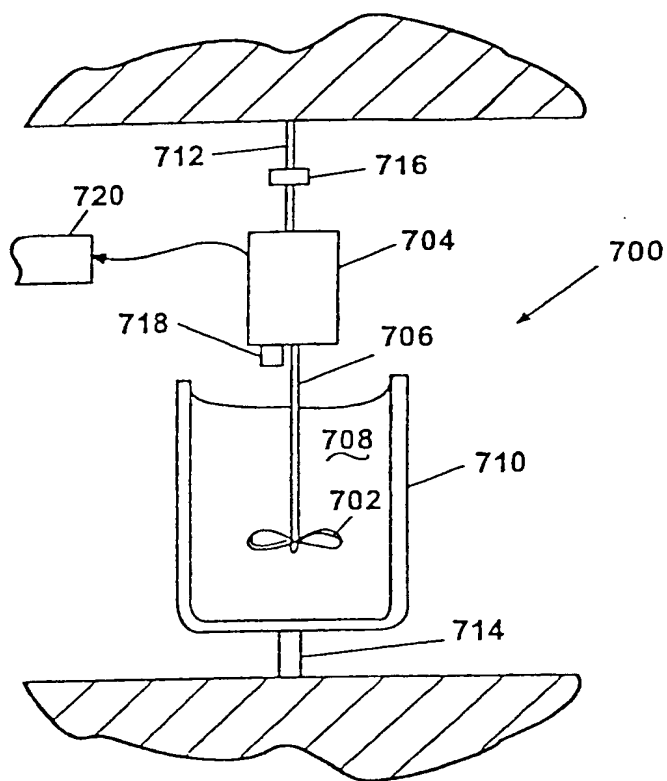
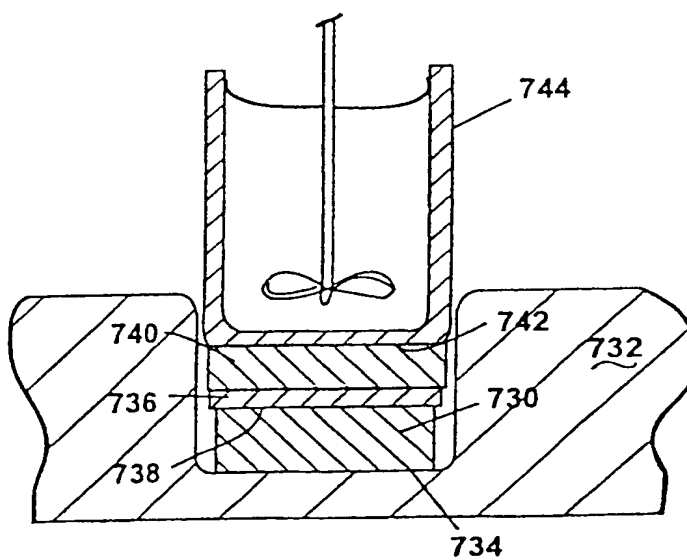


Fig. 22

**Fig. 23****Fig. 24**

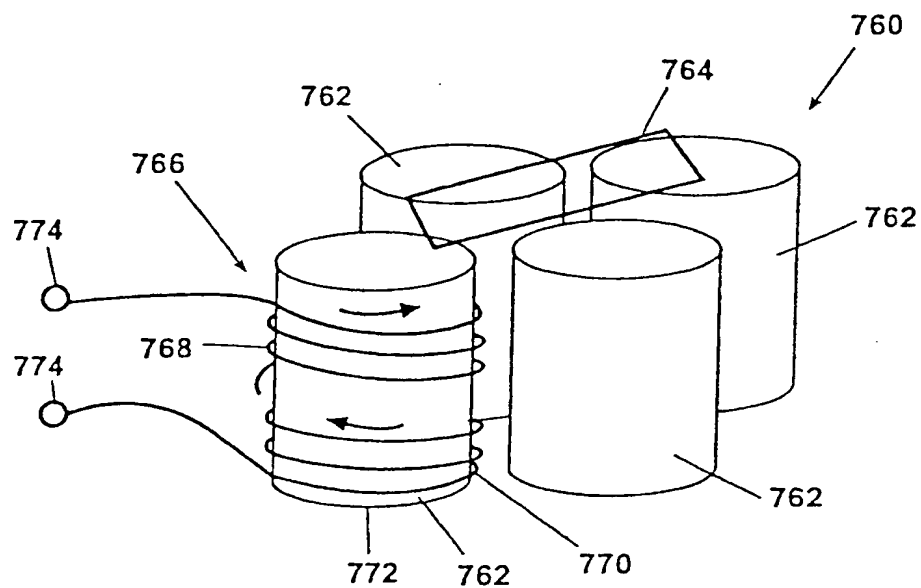


Fig. 25

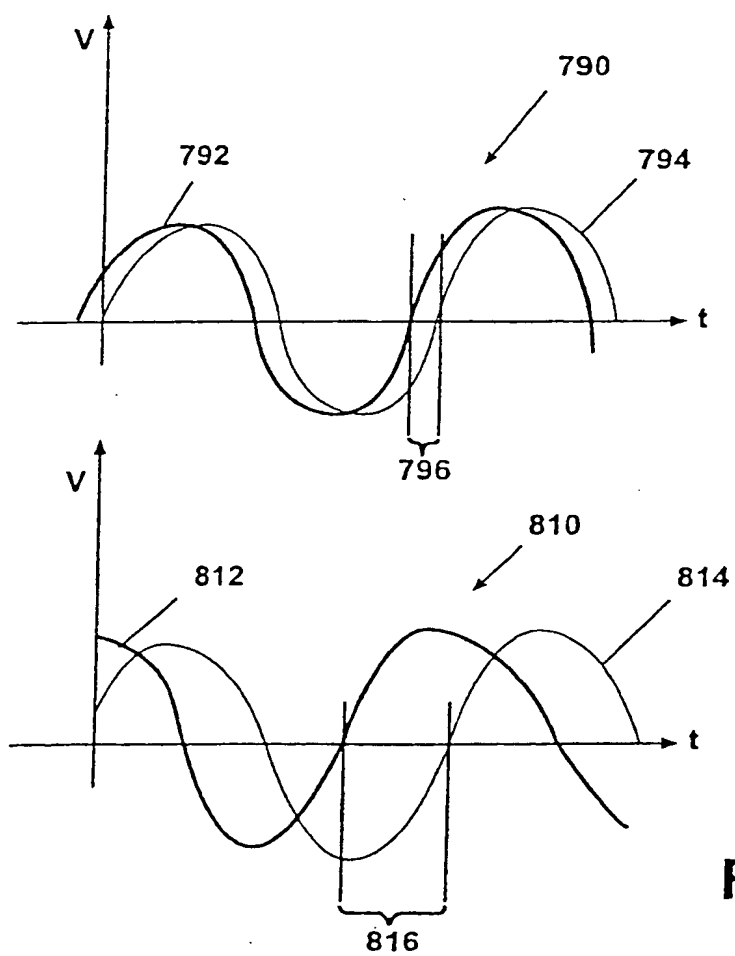


Fig. 26

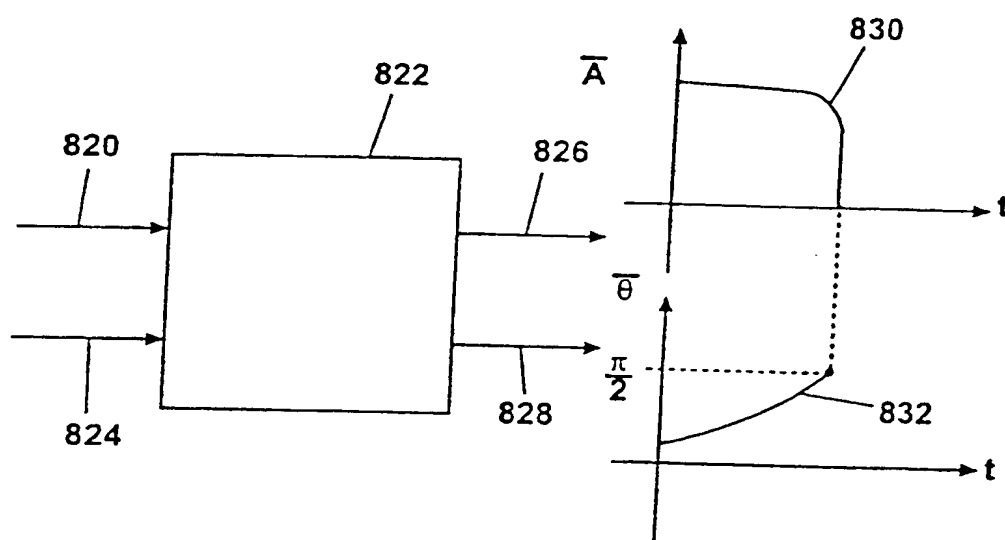


Fig. 27

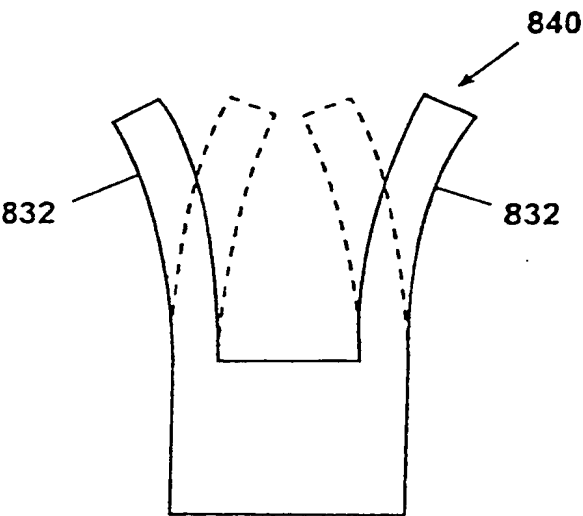


Fig. 28

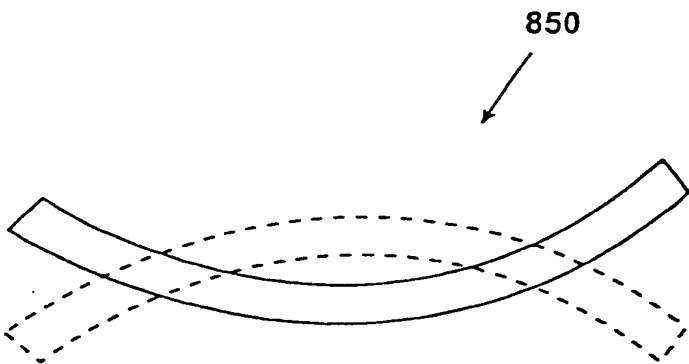
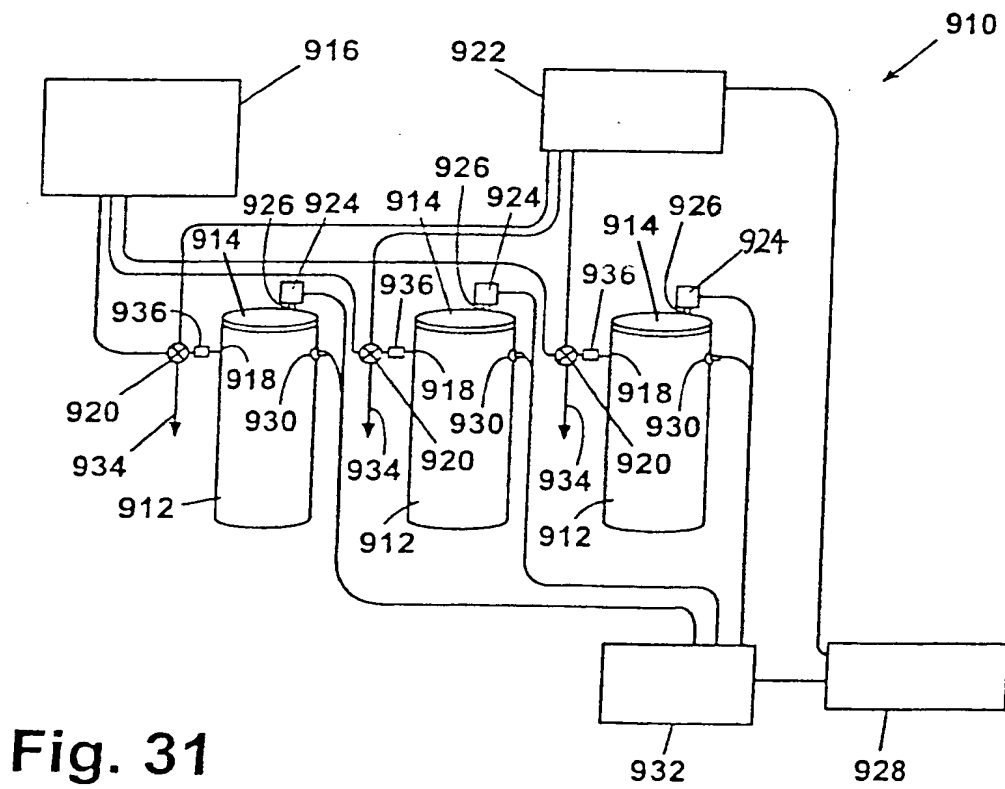
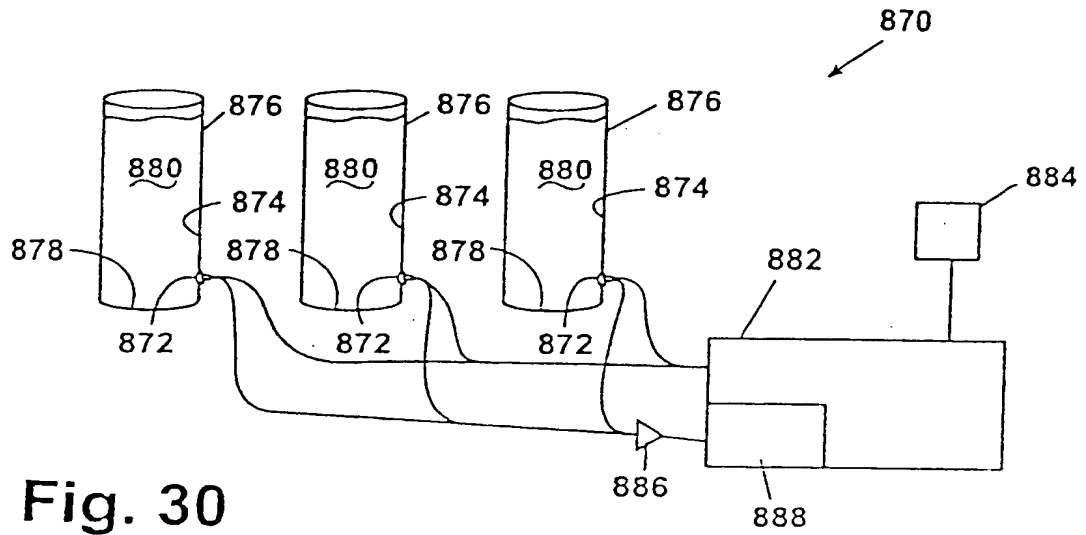


Fig. 29



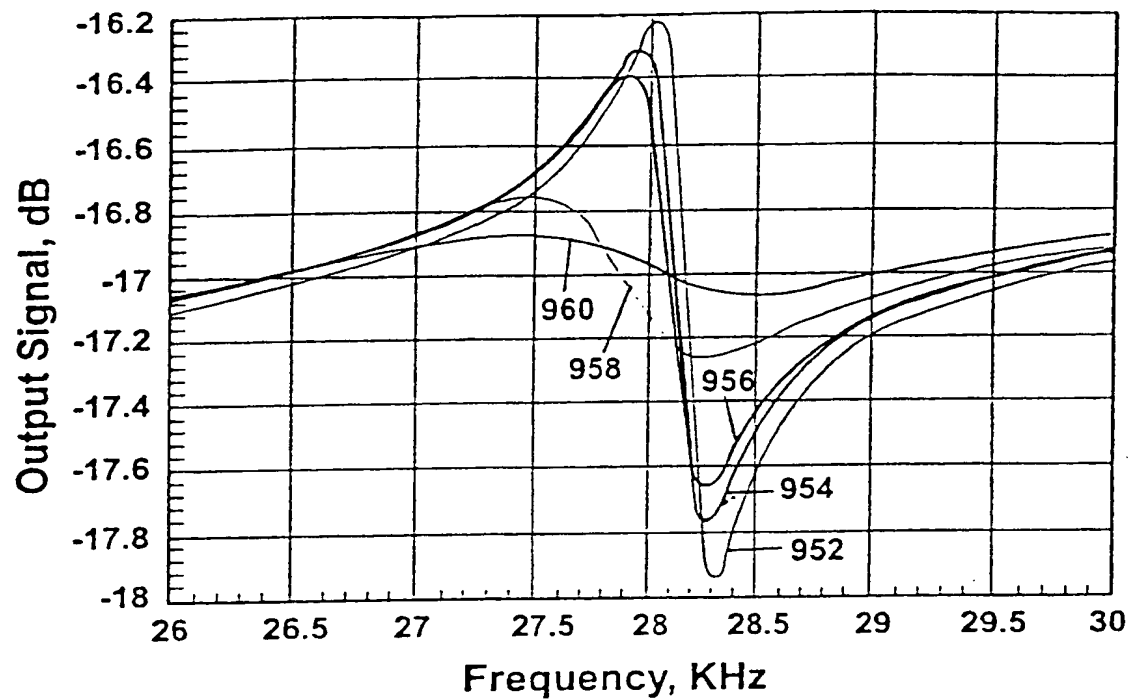


Fig. 32

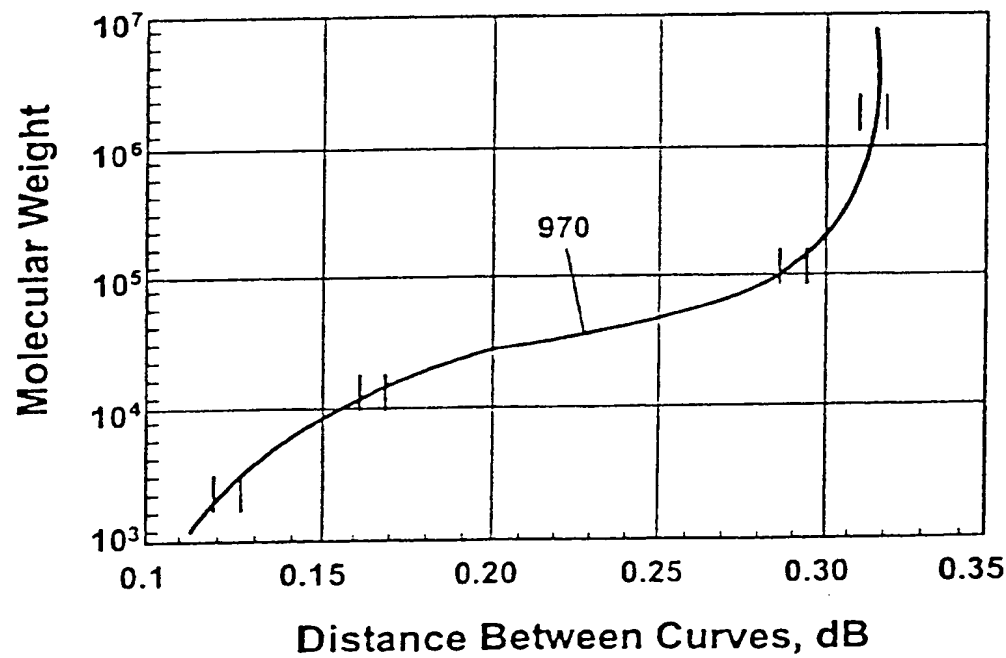
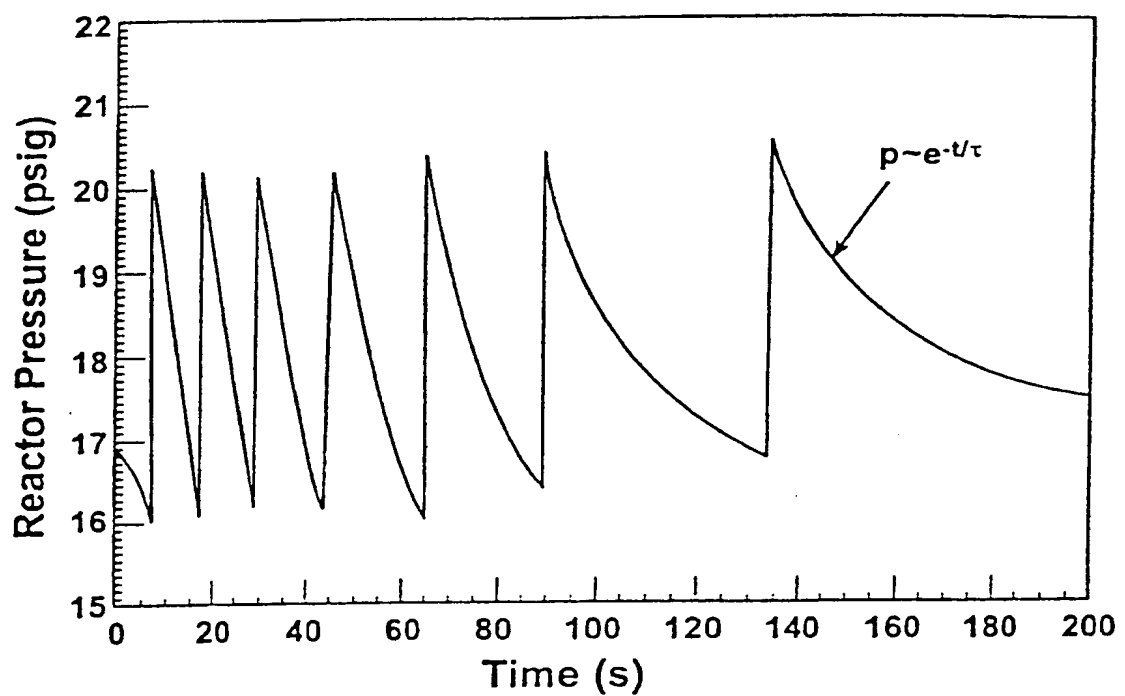
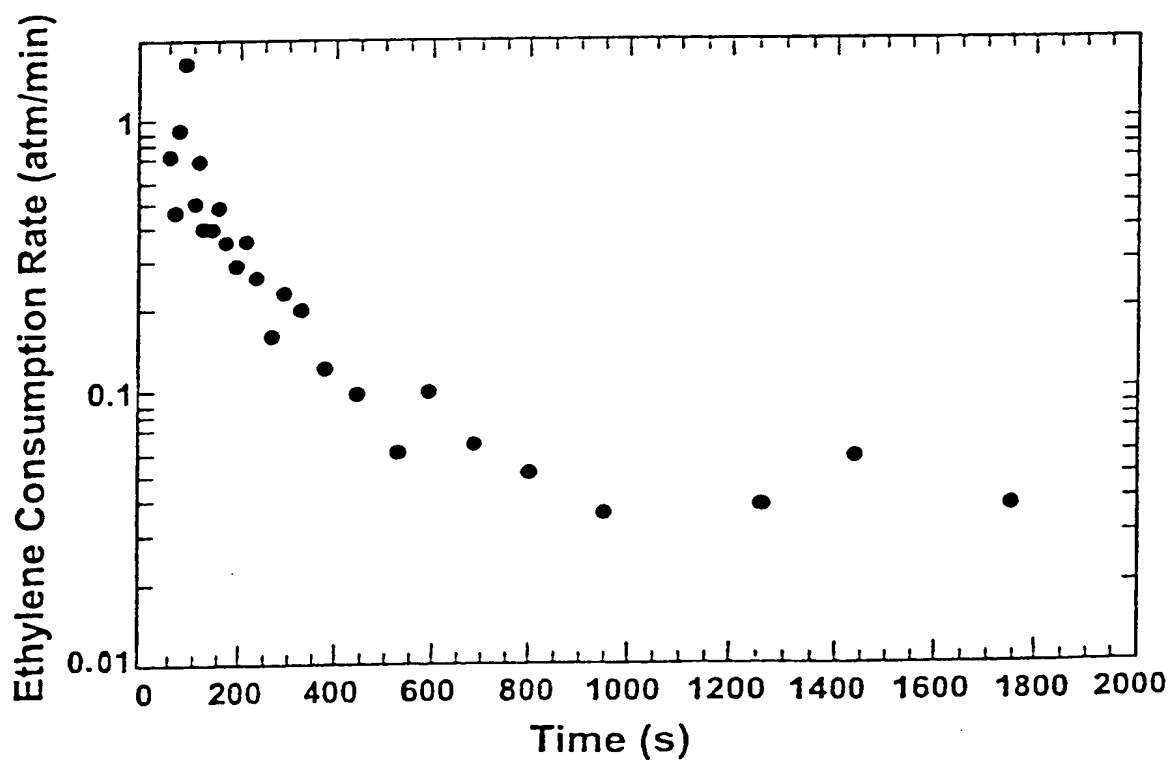
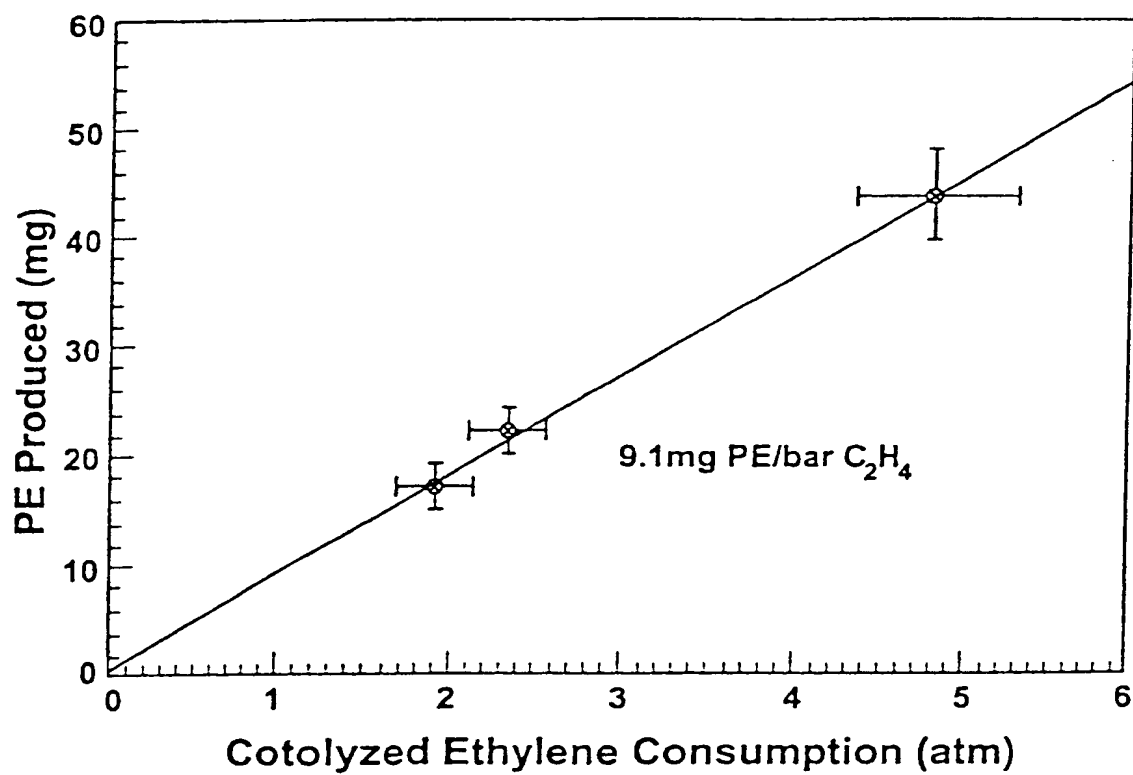
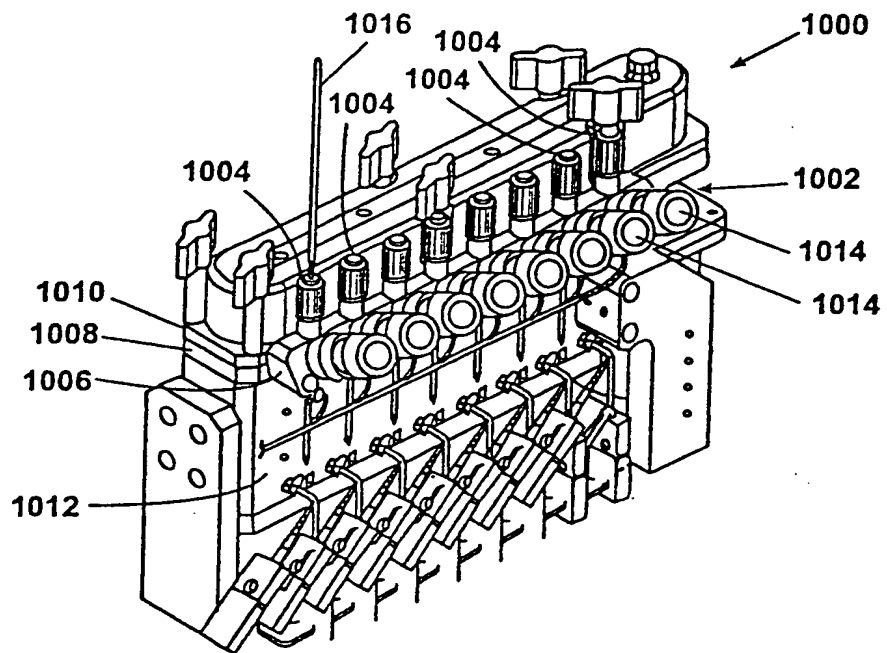
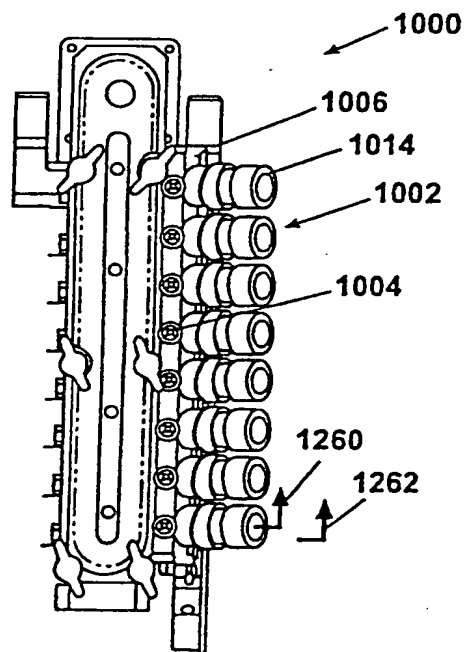


Fig. 33



**Fig. 34****Fig. 35**

**Fig. 36**

**Fig. 37****Fig. 46**

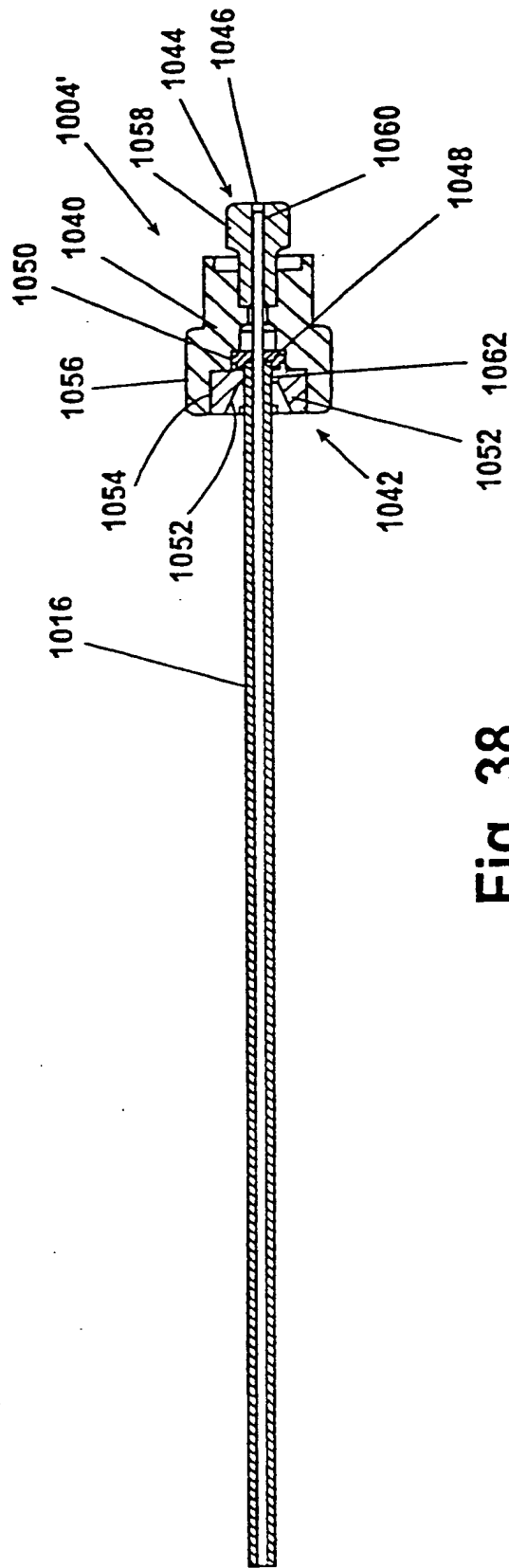


Fig. 38

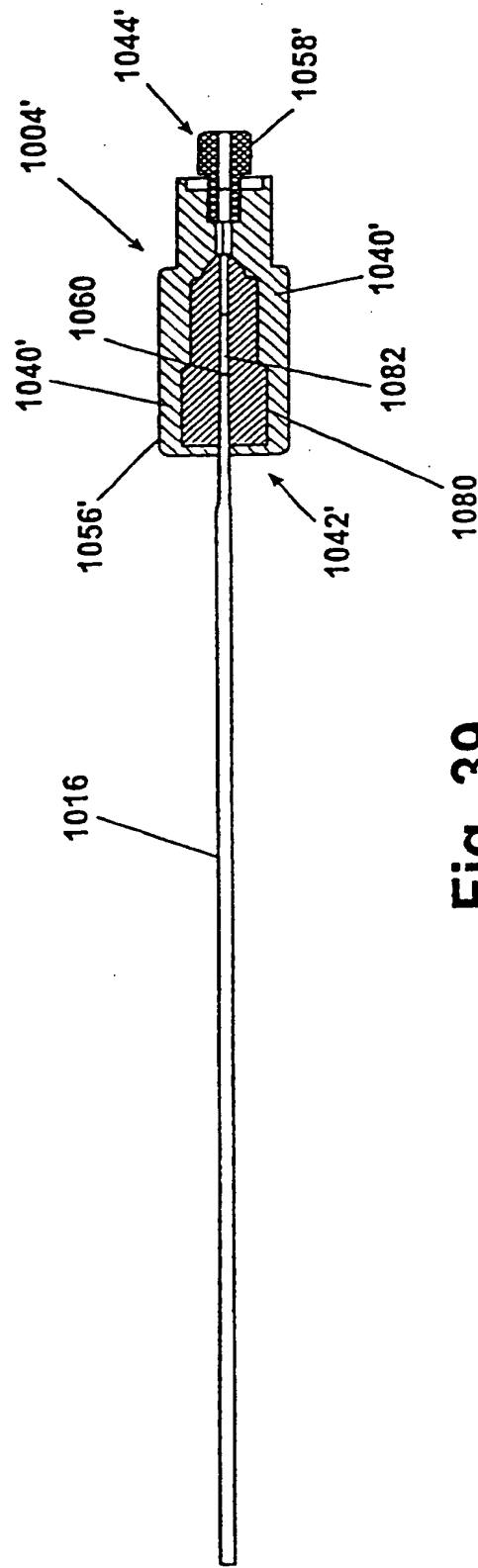


Fig. 39

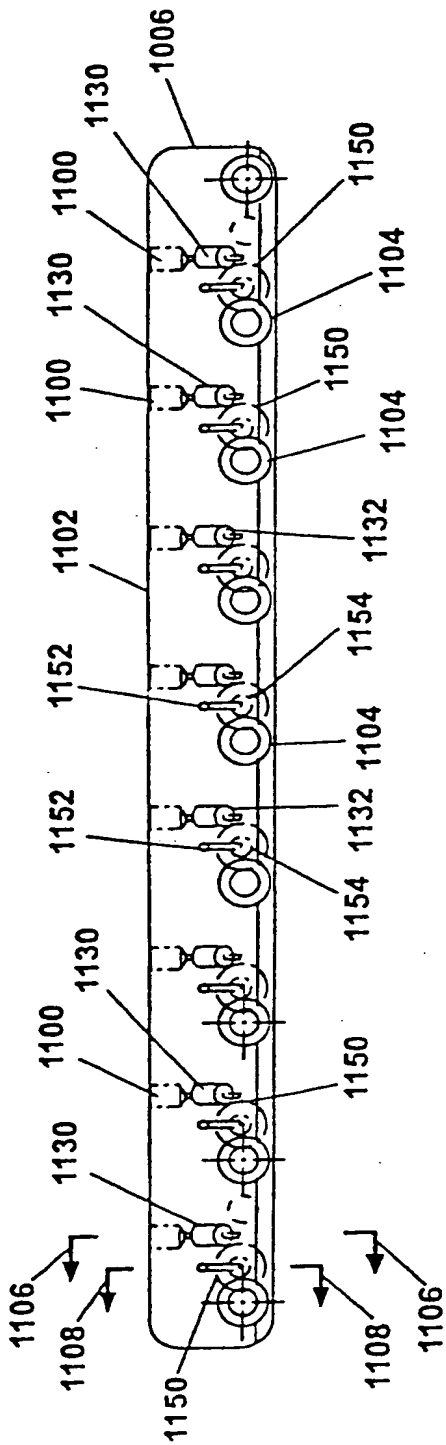
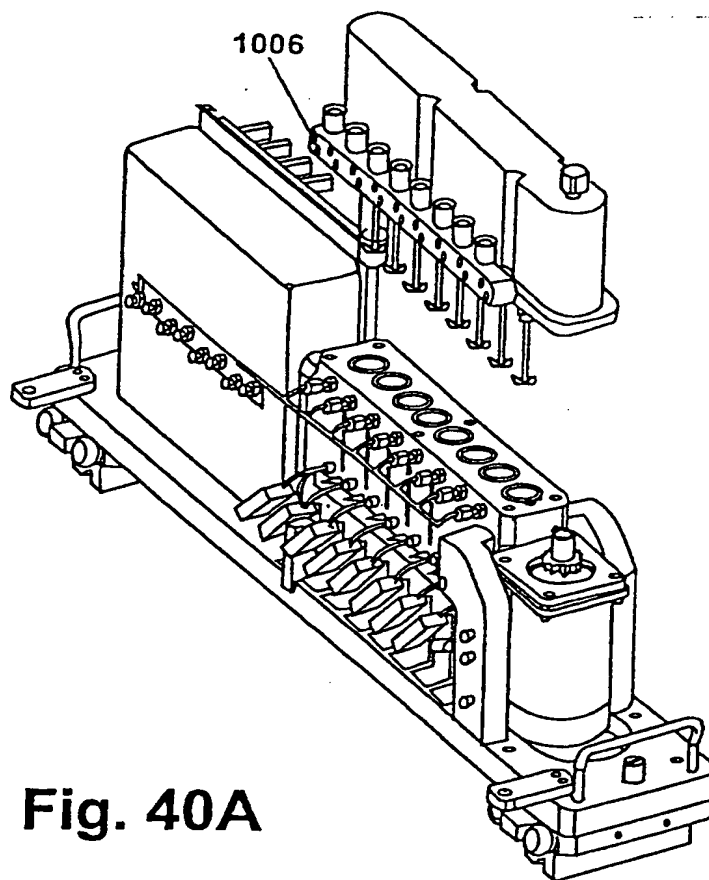
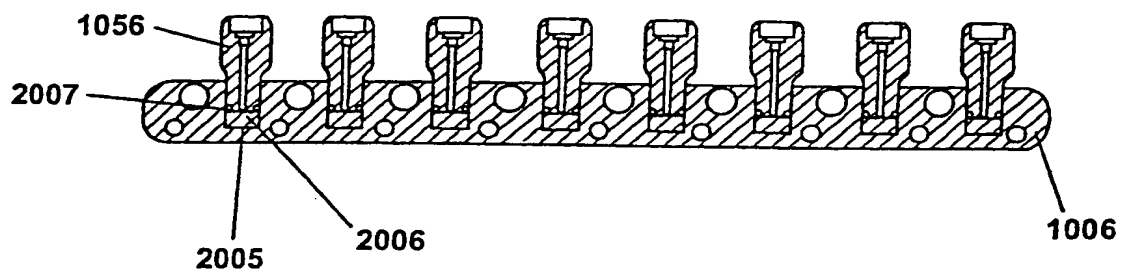


Fig. 40



**Fig. 40A**



**Fig. 40B**

Fig. 41

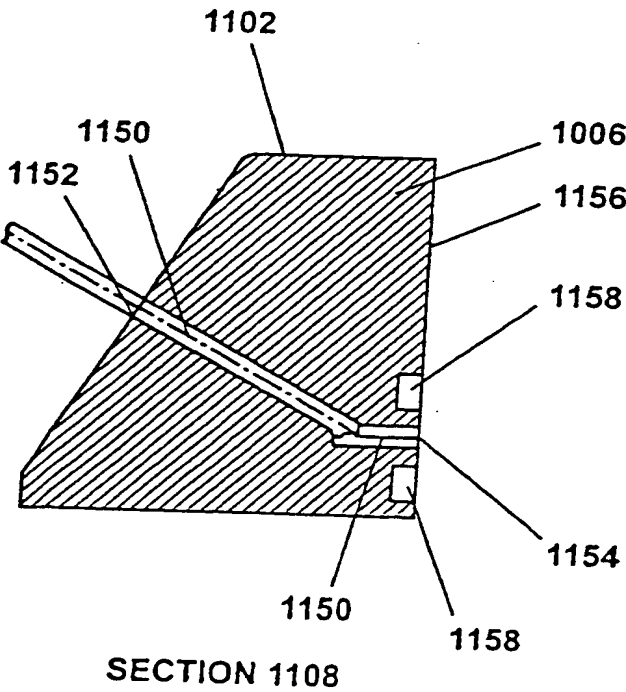
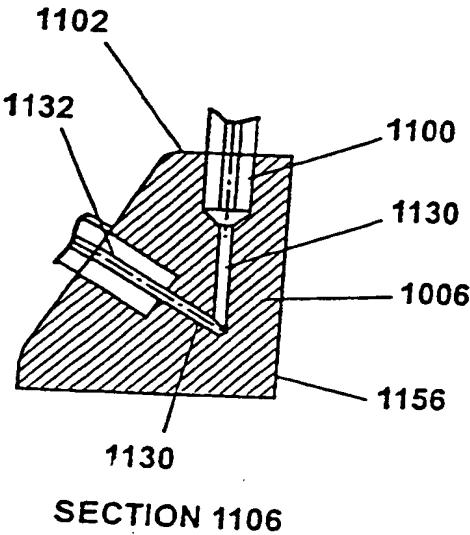
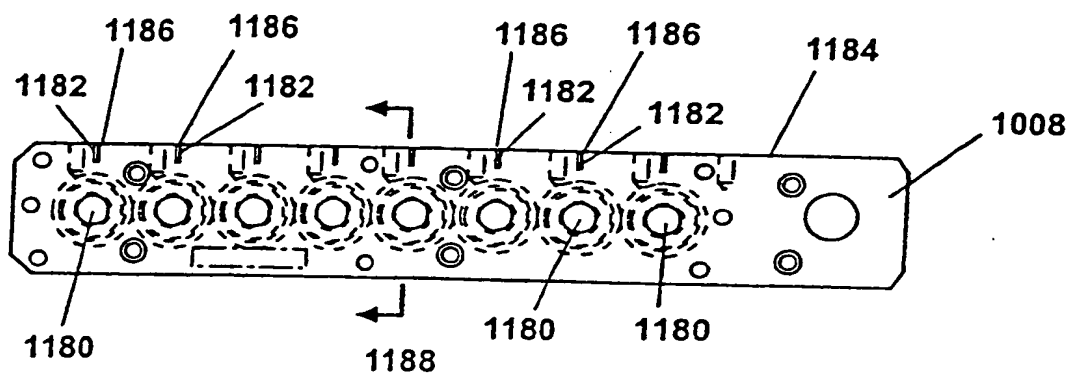
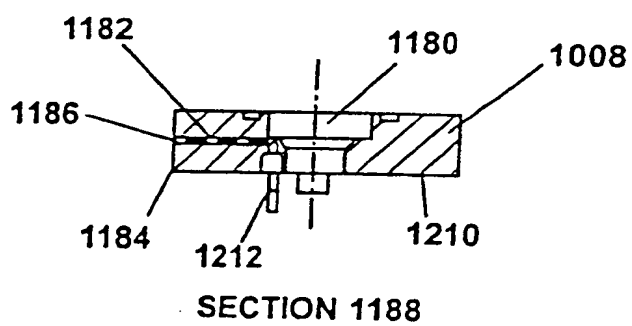
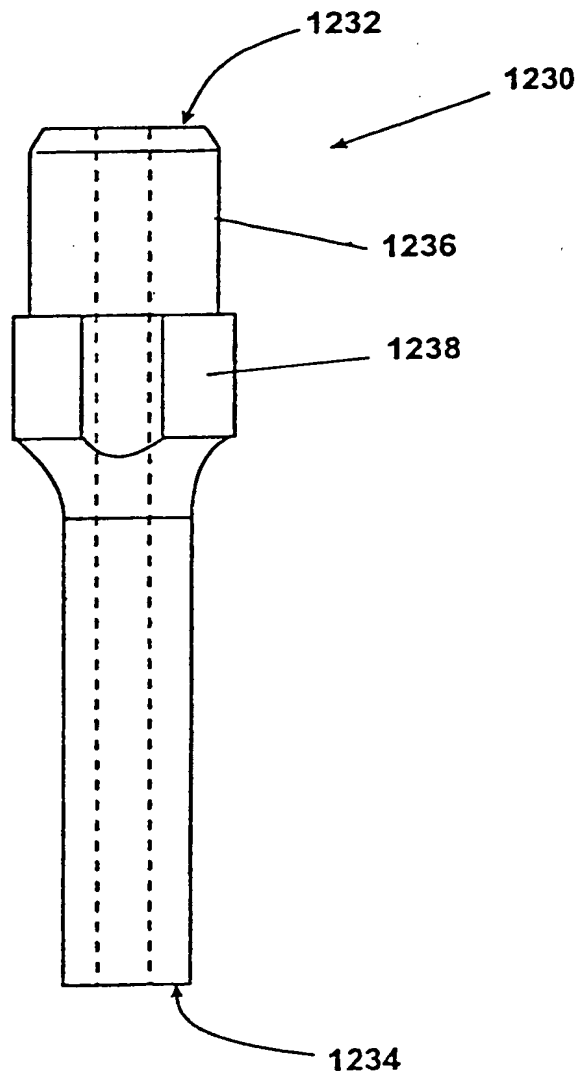


Fig. 42



**Fig. 43****Fig. 44**



**Fig. 45**

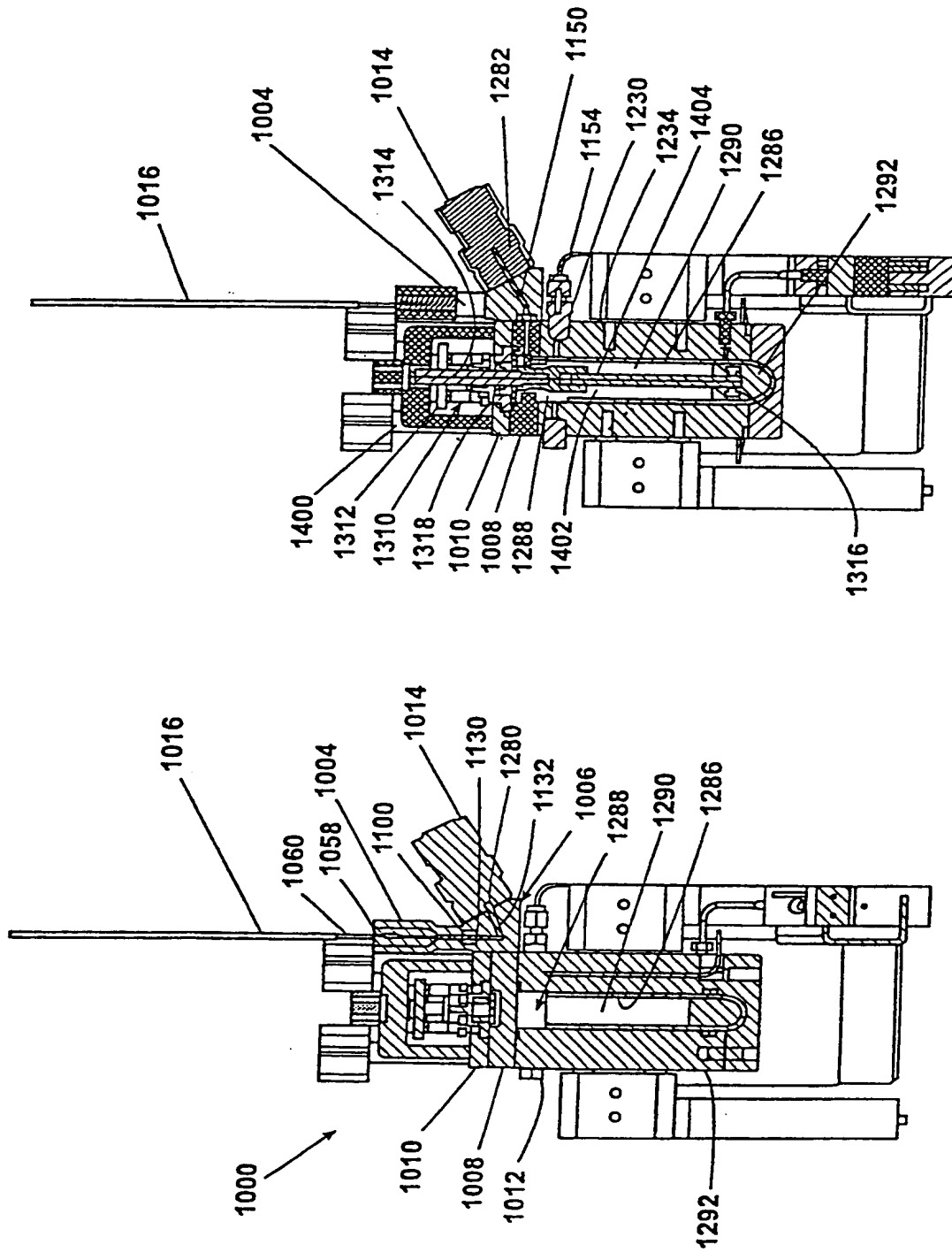


Fig. 48

Fig. 47

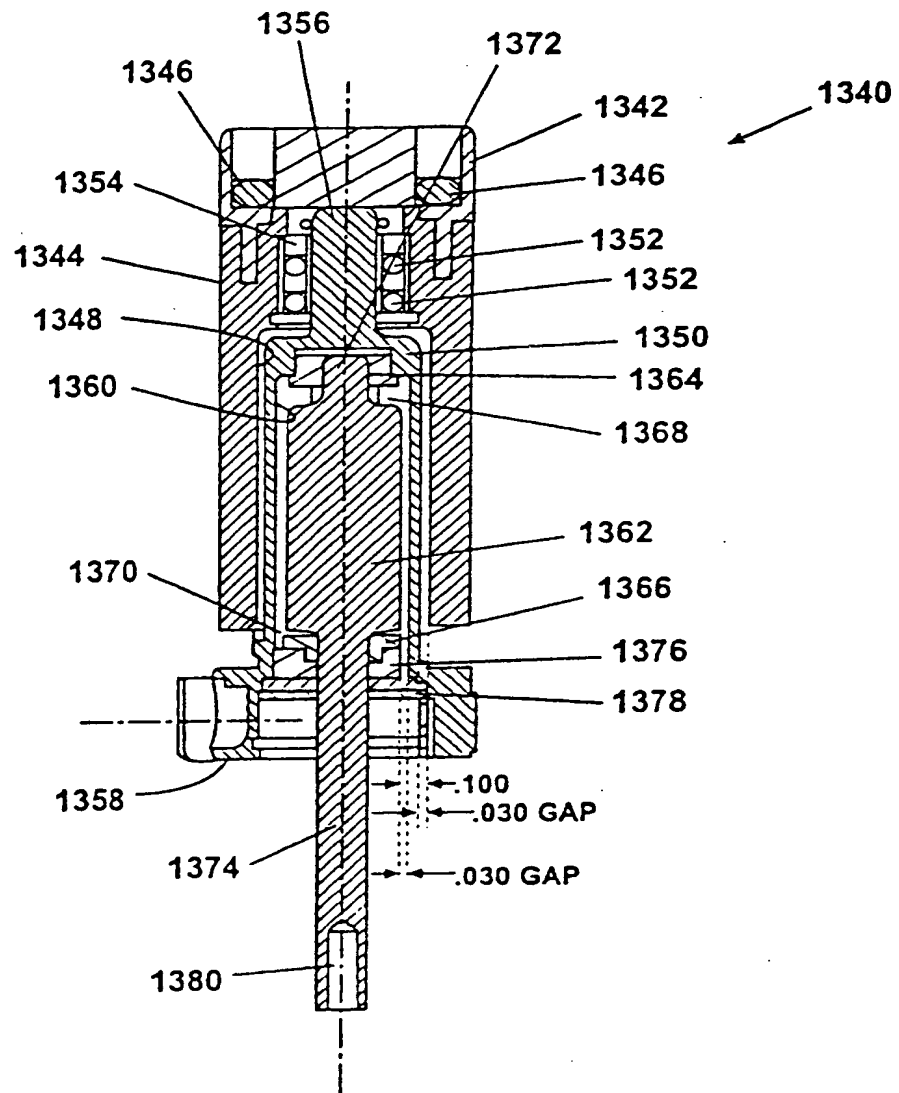
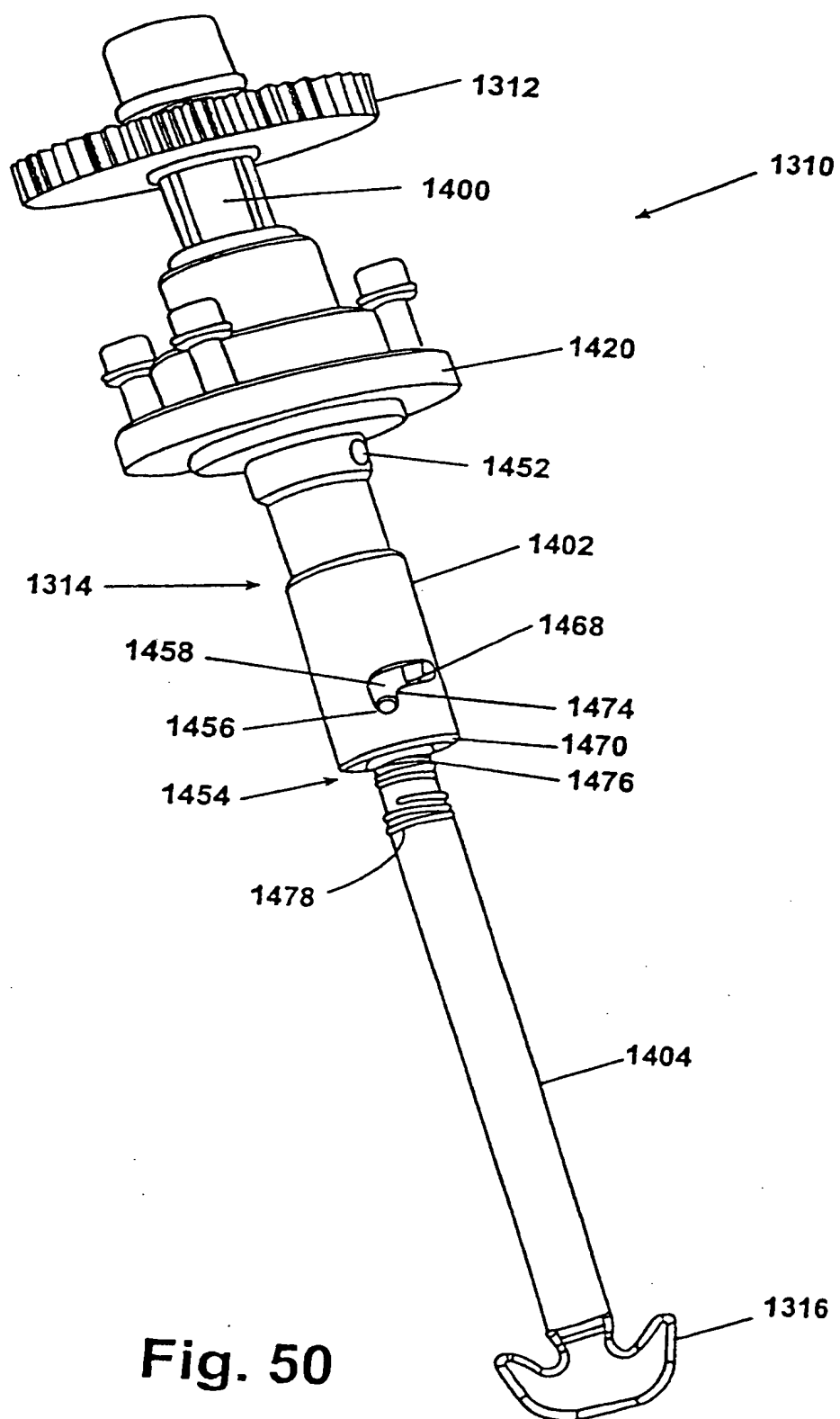


Fig. 49

**Fig. 50**

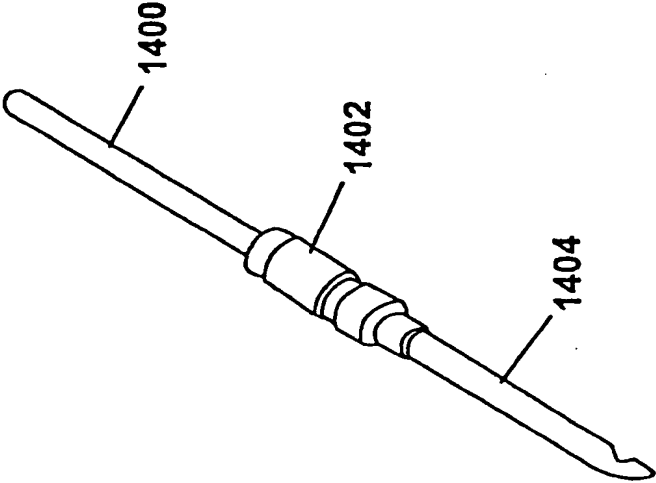


FIG. 50A

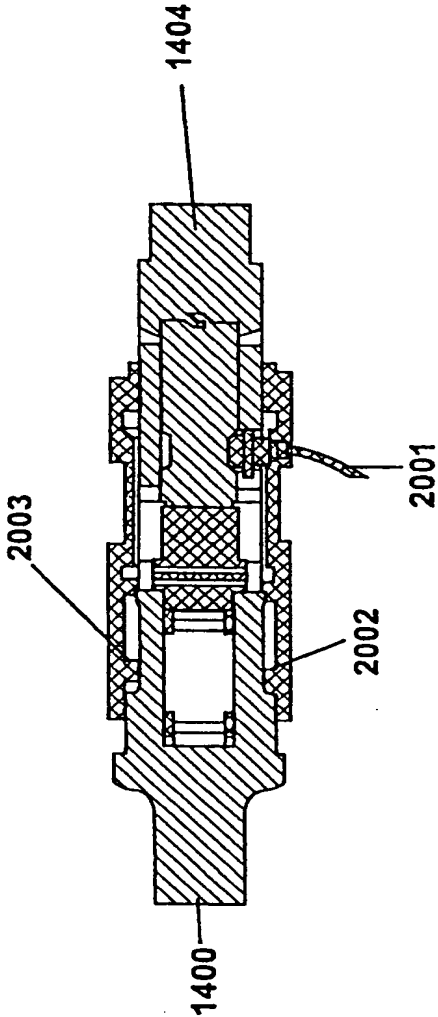
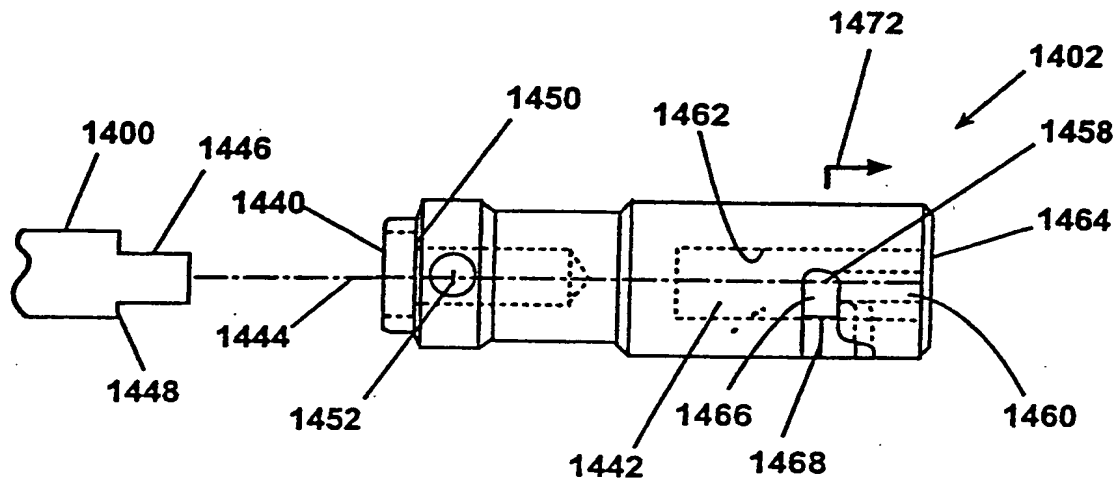
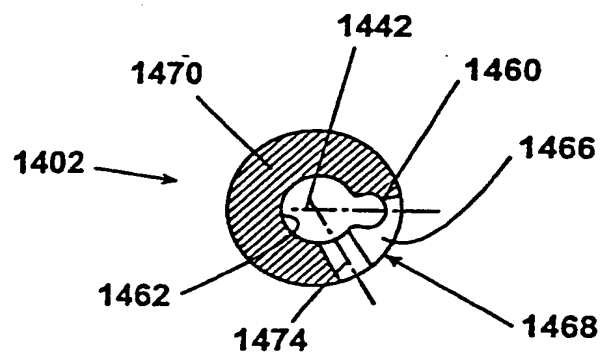
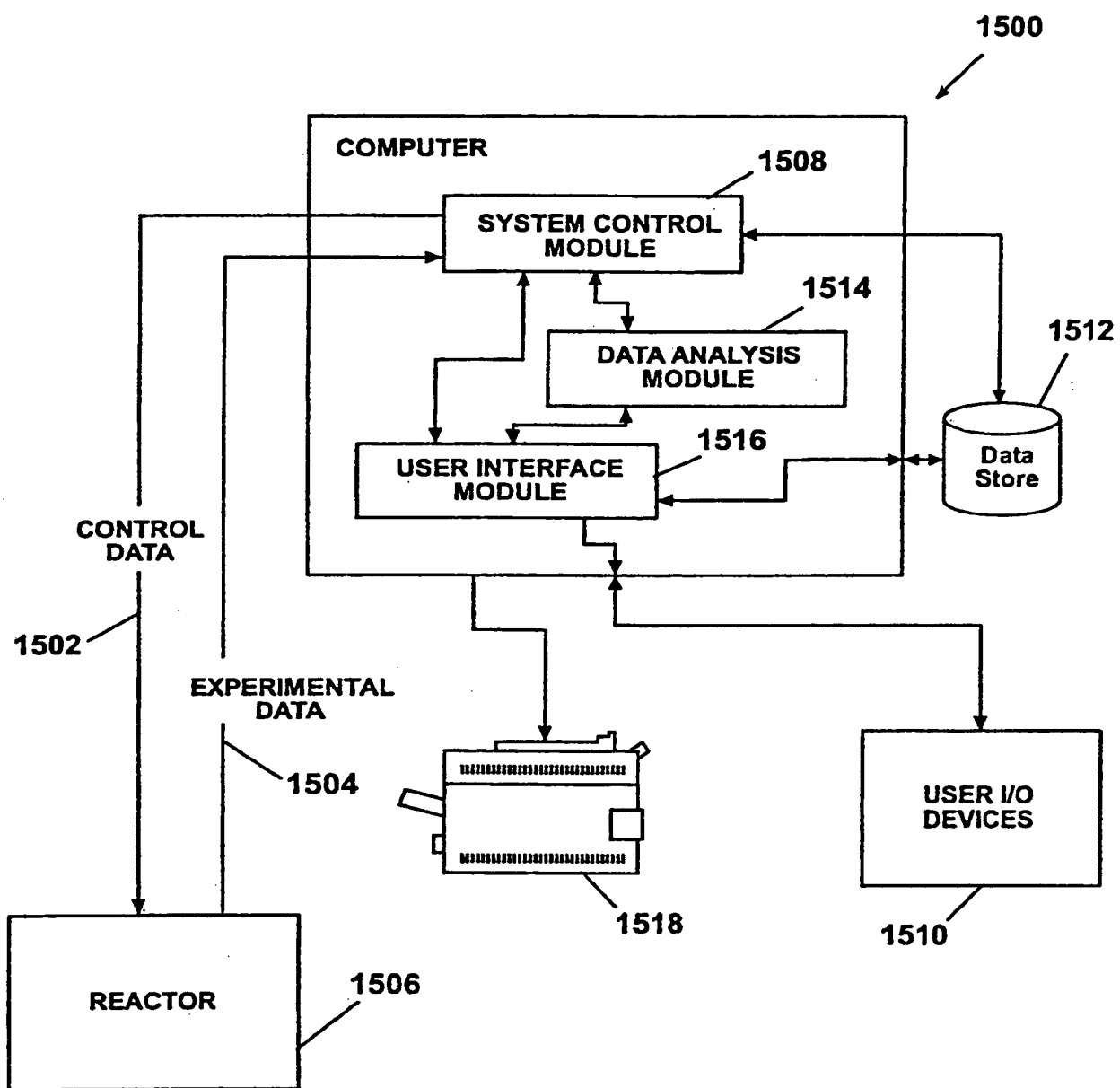
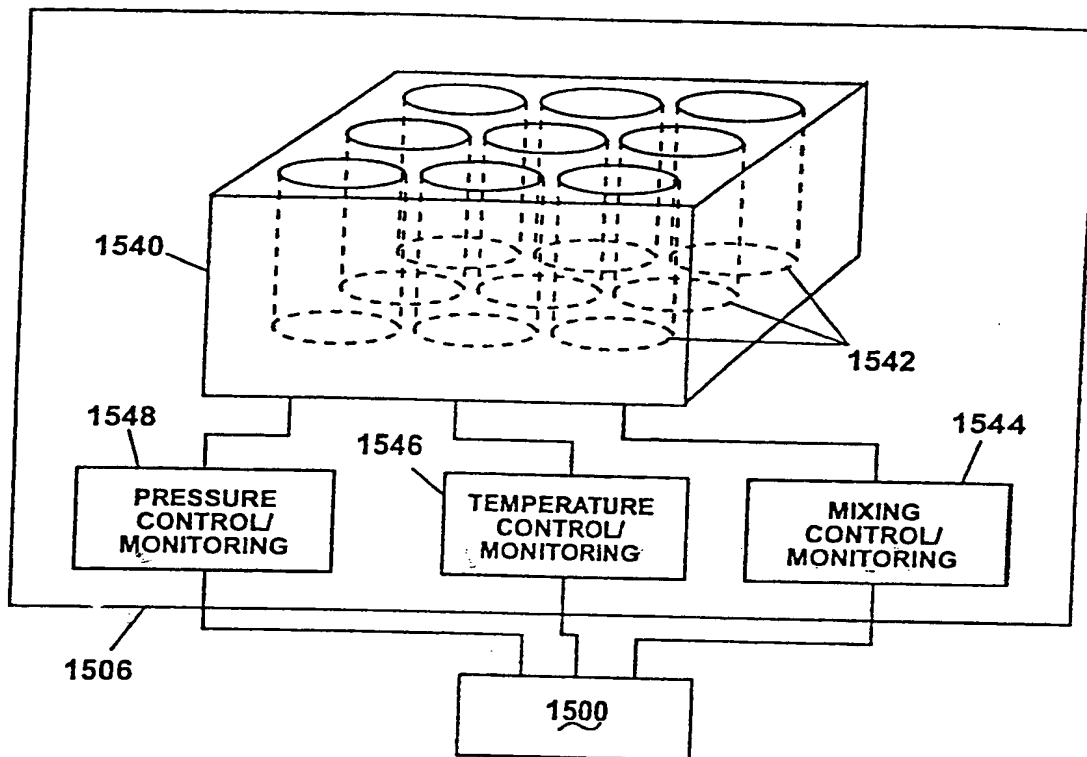
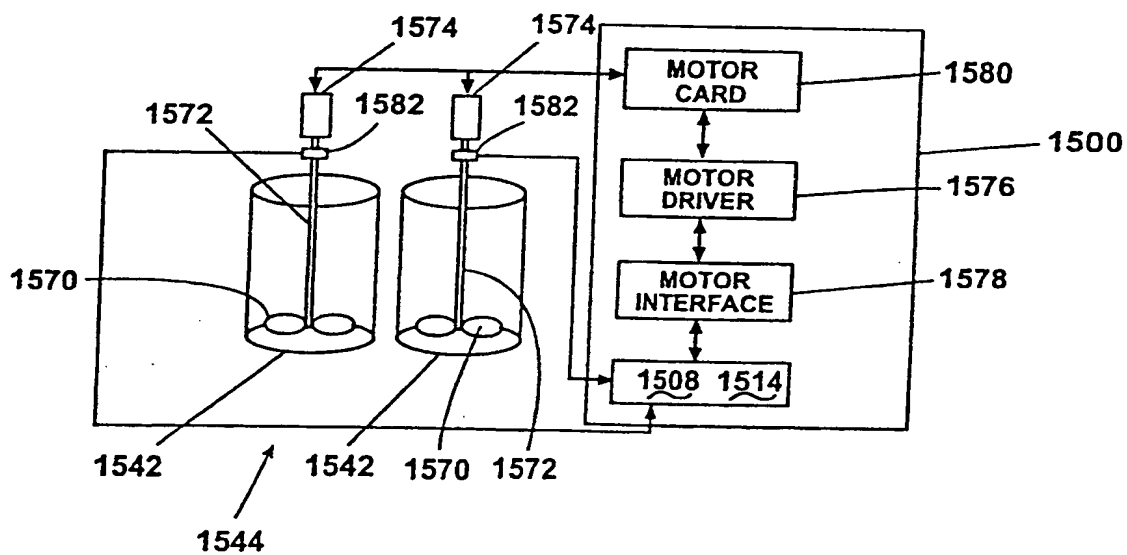


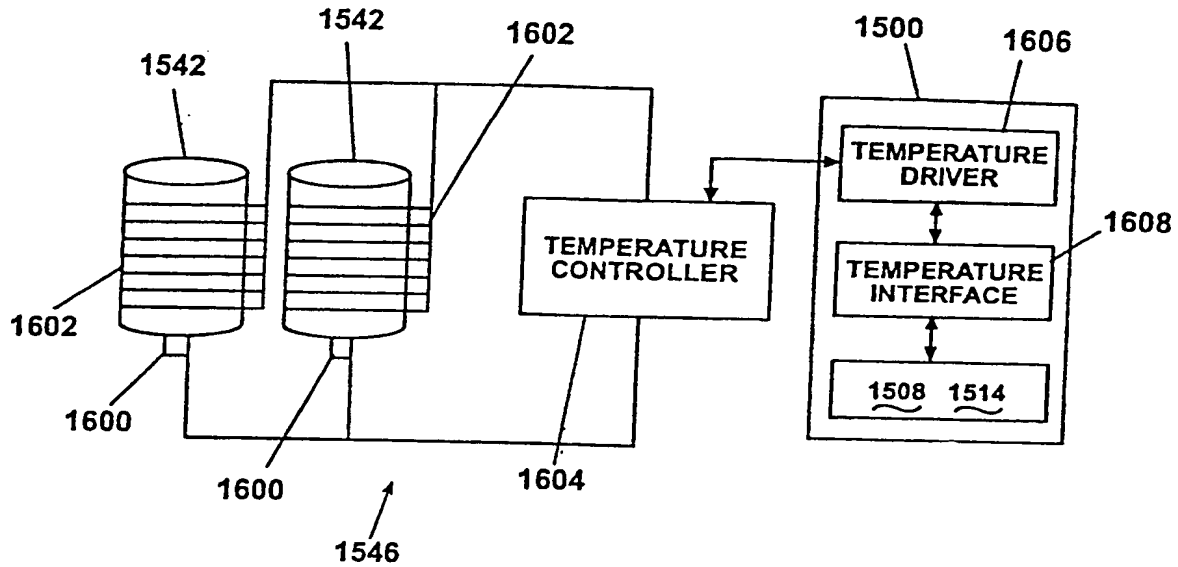
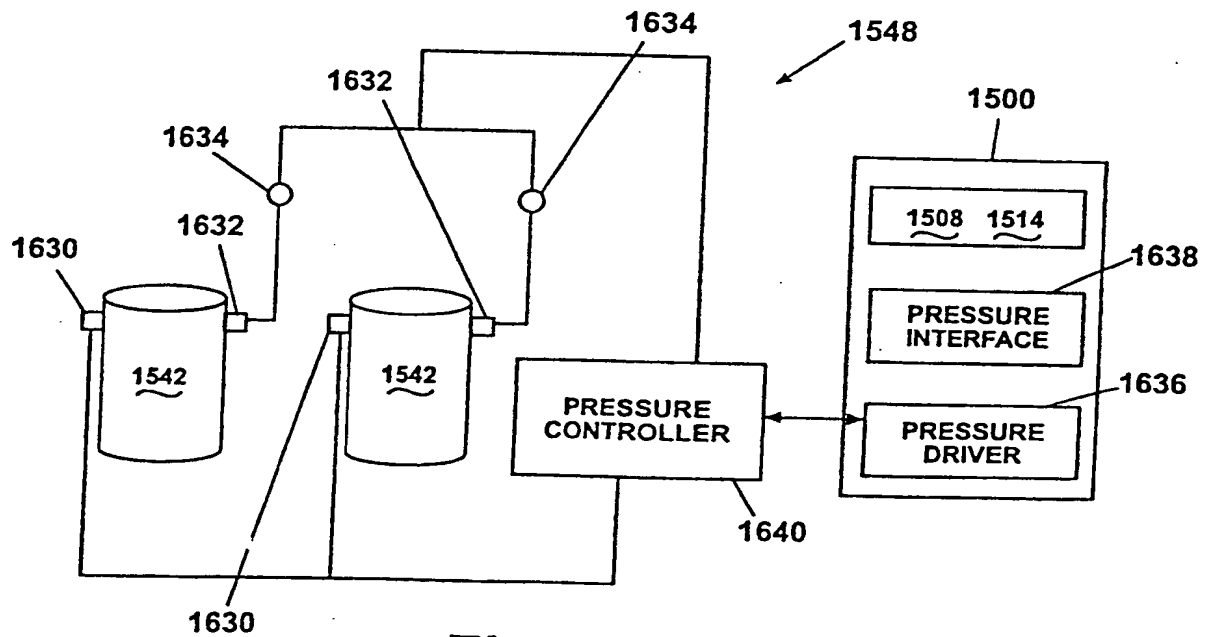
FIG. 50B

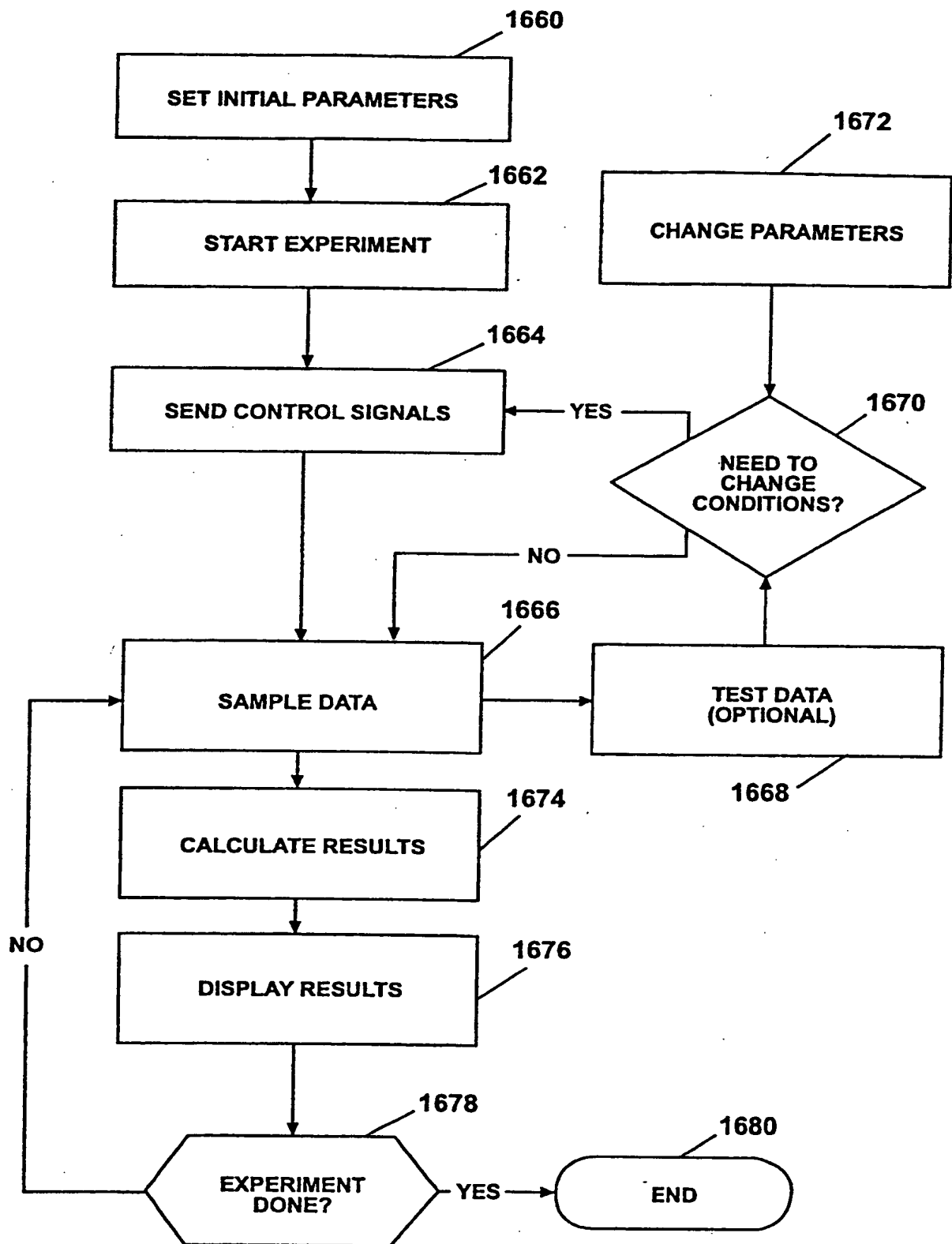
**Fig. 51****SECTION 1472****Fig. 52**

**Fig. 53**



**Fig. 54****Fig. 55**

**Fig. 56****Fig. 57**

**Fig. 58**

1700

System Configuration

Hardware Components

System Limits

File Directories

Motor Cards

Card 1 1 Axes

Card 2 0 Axes

Thermocouple Controller

Controller 1 1 Loops

Controller 2 0 Loops

Pressure Sensor

# of Channels 48

OK

Cancel

Apply

FIG. 59

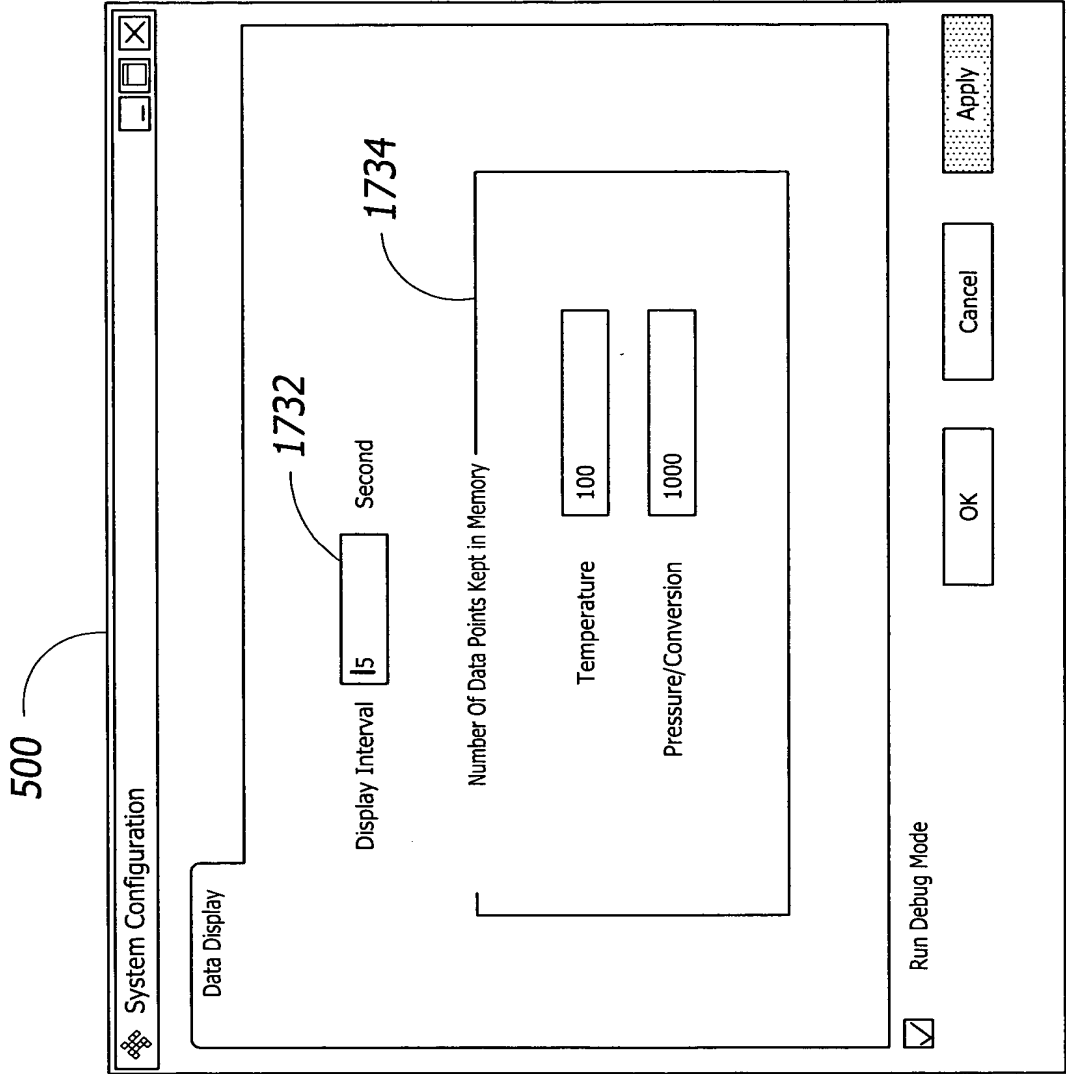


FIG. 60

1760

Reactor Setup

Motor

Experiment Time

60

Minute

1762

Speed

2

RPM

Safety Limit (RPM): 3200

☒ Single Direction

☐ Dual Direction

Heater

1772

Set Point

200

F

1776

Safety Limit (F): 392

1768

Turn Off Temp.

10

F

Unit

F

Mode

Manual

1774

Sample Rate

0.02

Hz

1770

Maximum (Hz): 0.1

Pressure

P<sub>set</sub>

100

psi

Safety Limit (psi): 100

Sample Rate

5

Hz

Maximum (Hz): 5

Load Defaults

Save as Defaults

Apply

Cancel

FIG. 61

1800

Temperature

Setpoints

1	<div></div>	<div>200</div>
2	<div></div>	<div>200</div>
3	<div></div>	<div>200</div>
4	<div></div>	<div>200</div>
5	<div></div>	<div>200</div>
6	<div></div>	<div>200</div>

Unit:F

1802

Safety Limit:392F

☐ Undo Gradient

OK

Cancel

FIG. 62

1830

Parallel Polymerization Reactors

File View Synthesis Reaction Data System Window Help

Reaction - Monomer / co-monomers

Param Scale Run Save Exit

System Status

Off

Motor ☐ Heater ☐ Pressure ☐

Setting

Parameter

Motor Speed (RPM)

Temperature (F)

Pressure (psi)

Value

2

200

100

Sample Rate

0.02

5

Time

0

60

Elapsed Time 0:0:0

1832

1833

1834

1836

1840

1842

1872

1838

1830

	1	2	3	4	5	6
A	252.6	219.9	259.5	203.2	265.5	623.0
B	247.5	524.8	214.1	277.8	260.0	538.2
C	256.8	132.8	258.5	257.7	278.9	649.8
D	181.3	125.9	159.0	196.1	177.6	471.2
E	254.7	219.8	125.3	308.7	920.9	219.1
F	263.9	187.5	1002.4	144.3	478.7	178.9
G	167.3	184.3	222.4	220.4	217.6	229.2
H	219.3	203.9	216.5	156.0	236.2	154.5

Module Blocks

Legend (Psi)

☒ 1075.1

☒ 971.8

☐ 868.5

☐ 765.1

☒ 661.8

☒ 558.4

☐ 455.1

☒ 351.8

☒ 248.4

☒ 145.1

Observations/Comments

Tim Power

9:40 AM

11/30/98

FIG. 63



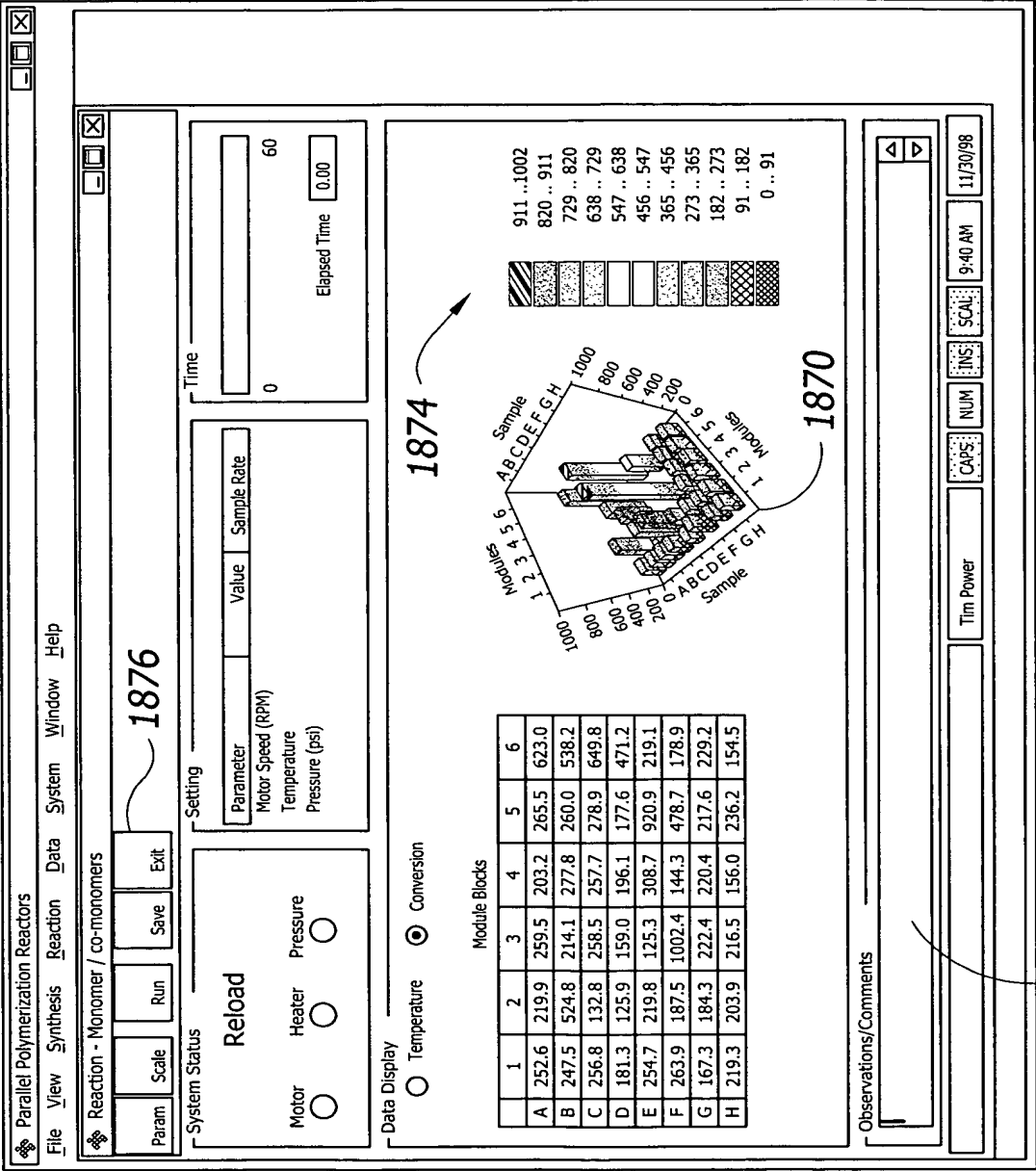


FIG. 64

1878

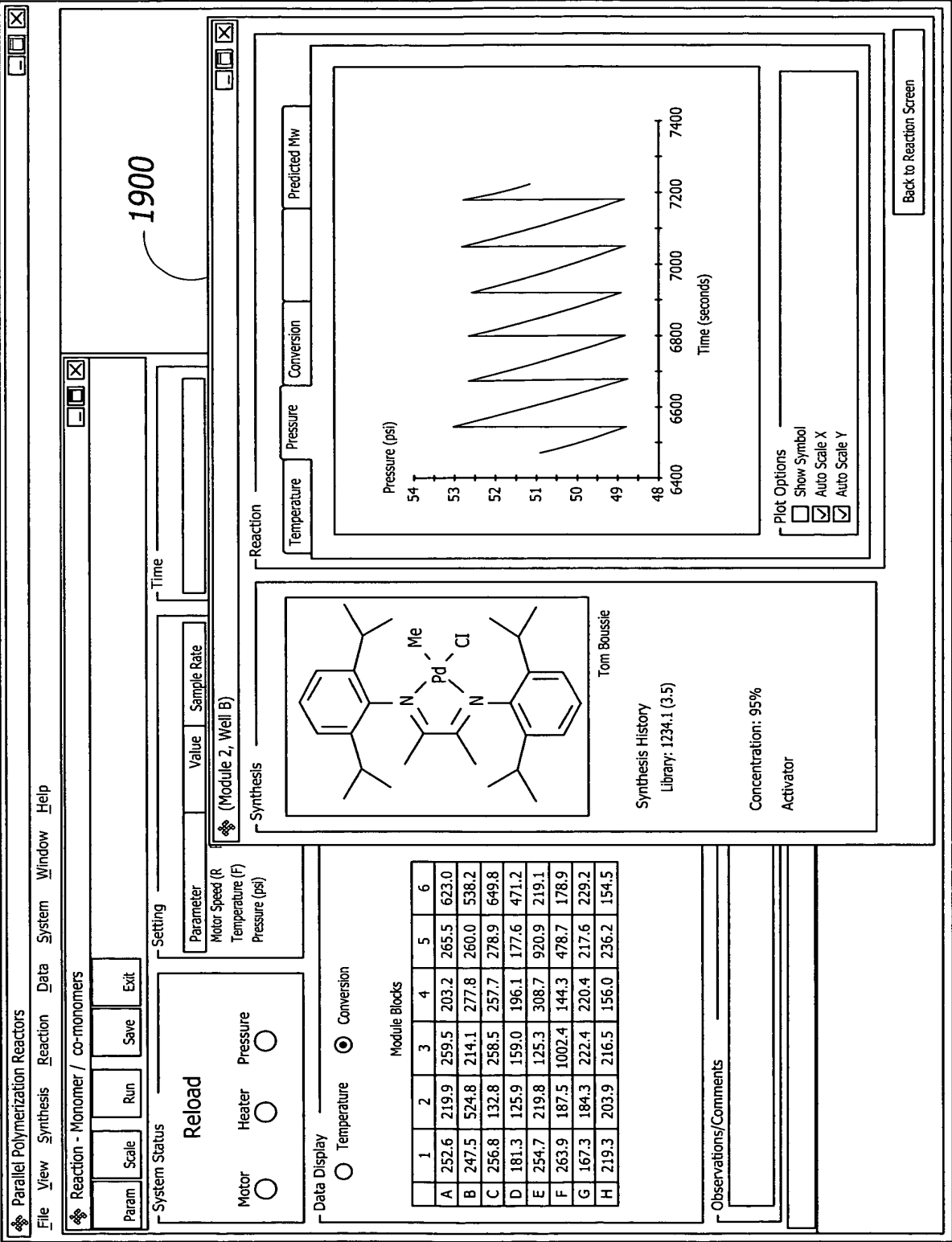


FIG. 65

FIG. 66

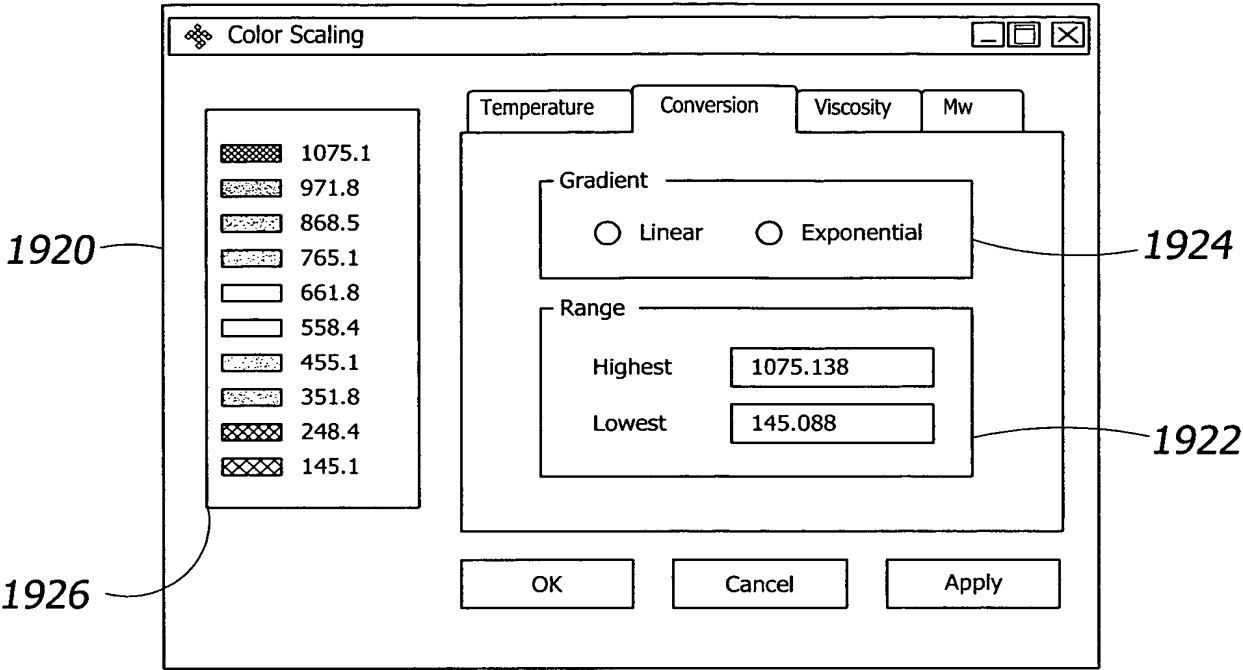


FIG. 67

